Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

62.37

Manns'

SUPERIOR

1934

MARKET GARDENERS' CATALOGUE

VEGETABLE
SEED TRIALS
HORTICULTURE

SEEDS

J. MANNS & CO.

(EST. 1887)

FORREST AND HILLEN STS. (—At— Belair Market) BALTIMORE, MD.

Flower Seed Catalogue Mailed on Request

It is always

• *Wise* • *Safe* *and* *Economical*

to sow

MANNS' SUPERIOR SEEDS

BECAUSE

They are selected by trial from the World's Best Strains.

Carefully rogued to maintain the high standard of perfection required by critical Market Gardeners who appreciate quality.

Vitality tests are made by the most modern methods and trial grounds are operated under the personal supervision of Mr. John Manns for your protection.

We recognize our responsibility of supplying stocks in which the Trucker can safely invest his labor, his time and his land.

Our prices are low, the result of our advantageous location, capable personnel, and long years of practical experience under the original management.

We regard your confidence, good will and satisfaction as our greatest assets.

Phone Wolfe 5161 *Suburban Delivery*

Prompt, Courteous, and Intelligent Attention Always

MAIL ORDERS: We pay Parcel Post or Express Charges on all vegetable and flower seeds, except Beans, Corn, Peas, and Seed Potatoes. This enables distant customers to use Manns' Superior Seeds at no additional expense.

PLEASE READ—Non-Warranty

It is very evident to anyone who gives the matter the slightest thought that it is to our best interests to send out only such stock as will grow and prove true to name and description. There are, however, so many contingencies to be encountered, entirely beyond our control, such as the weather, soil and other conditions that: **J. Manns & Company give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any Seeds, Plants or Bulbs sent out, and will not be in any way responsible for the crop.**

Domestic Parcel Post Rates Within the U. S. and Possessions		For First Pound	For Ea. Addit'l. Pound
First Zone within	50 miles	$0.07	$0.01
Second Zone within	50 to 150 miles	.08	.01
Third Zone within	150 to 300 miles	.09	.02
Fourth Zone within	300 to 600 miles	.10	.04
Fifth Zone within	600 to 1000 miles	.11	.05
Sixth Zone within	1000 to 1400 miles	.12	.07
Seventh Zone within	1400 to 1800 miles	.14	.09
Eighth Zone over	1800 miles	.15	.11

All Prices Quoted Subject to Change

Where Market Gardeners Buy

Quality of Strains Proven at Our Trial Grounds

ORDER SHEET

Established 1887

J. MANNS & CO.

Superior Seeds

BALTIMORE, MD.

FORREST AND HILLEN STS. AT BELAIR MARKET

HAVE YOU ALLOWED FOR NECESSARY POSTAGE AND BAGS IN YOUR REMITTANCE?

Cotton Bags 30c each
Burlap Bags 10c each
No charge for boxes or other packing

Date.....19.....

Name.....

Post Office..... R. F. D. No.....

Freight Office..... State.....

Please Forward Via.....
(Express, Freight or Parcel Post)

Enclosed.....For $.....
(Check, Money Order or Stamps)

J. MANNS & CO., give no warranty express or implied, as to description, quality, productiveness or any other matter, of any Seeds, Bulbs, Plants they sell, and will not be in any way responsible for the crop. If purchaser does not accept the goods on these terms, they are at once to be returned.

QUANTITY	ARTICLES	PRICE	
	Amount Carried Forward,		

WANTED—Names and addresses of your acquaintances who should receive our Annual Catalog, Price Lists, etc. We will appreciate your kindness and so will they.—Thank you.

NAMES	POST OFFICE	STATE

QUANTITY	ARTICLES	PRICE	
	Amount Brought Forward,		

1887 **J. MANNS & CO.** 1934

ESTABLISHED 1887

SUPERIOR VEGETABLE SEEDS

Selected from improved strains having true commercial merit, offered at lowest possible prices consistent with highest Quality. FOR MARKET GARDENERS and other judicious and careful growers who sow the best.

FORREST AND HILLEN STS. . AT BELAIR MARKET

BALTIMORE, MD.

Varieties of Special Merit

OUR general stocks are unexcelled in quality and better seeds cannot be purchased at any price. The following recently improved strains, however, are worthy of special consideration and should be grown by every progressive market gardener.

BEANS

ASGROW VALENTINE—This new Black Valentine **without strings** was grown by market gardeners for the first time in 1931. It is as hardy, early and prolific as the old Black Valentine. May be planted very early, and produces pods long, straight, round, stringless, meaty, a first-class shipper, and of excellent table quality. **Qt., 30c; pk., $1.75; bu., $6.50.**

ERFURT SPECIAL (NEW)—If you grow Italian varieties of **FAVA, BROAD BEANS, ERFURT BEANS,** be sure to grow Erfurt Special this year in preference to any other variety. It is much earlier, extremely large and of excellent quality., **Qt., 40c; pk., $2.50; bu., $9.00.**

Asgrow Valentine

BEET

Manns' New Model Beets Grown by Rohe Bros.

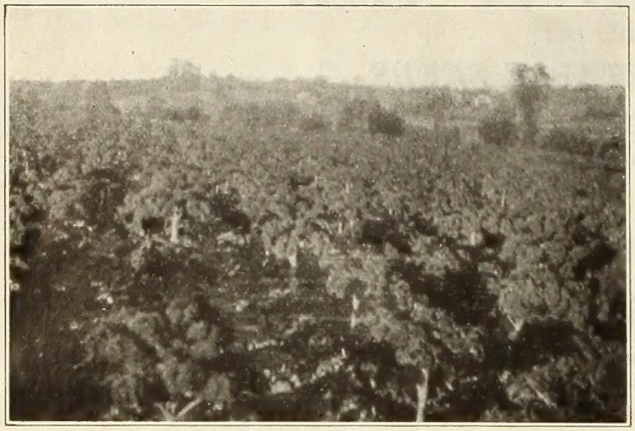
NEW RUBY GEM AND NEW MODEL ARE TWO REAL MONEY MAKERS, SEE PAGE 7

CABBAGE

***YELLOWS RESISTANT VARIETIES**—The State of Wisconsin and several other State Departments of Agriculture have for a number of years been working on the best commercial cabbage varieties, adapting them to resist yellows or wilt. It is now possible with these resistant stocks to grow cabbage successfully even on diseased land, by sowing seed which is grown under special conditions to make it resistant. While the cost of this seed is somewhat higher than non-resistant seed, there is the added advantage of securing stock which has been reselected for conformity to true type and heading quality. Therefore these improved varieties are most desirable for both diseased and clean ground. See pages 10 and 11.

FLOWER SEED, PLANT AND BULB CATALOG

Now issued separately and mailed free to growers of Flowers.
If you wish to have a copy of same please advise.



Borecole—Superior Extra Curled

BORECOLE

SUPERIOR EXTRA CURLED GREEN SCOTCH — More curled than any other Borecole and yielding many more bushels per acre due to its extremely vigorous growth. Nearly as hardy as Hardy Winter and now very popular with many of our customers. **Pkt., 10c; oz., 20c; ¼ lb., 50c; lb., $1.75.**

CURLED PERFECTION—An improved type, specially rogued and developed from a privately held American stock. Well curled and of a wonderful dark green color; winters well and commands top prices. **Pkt., 10c; ¼ lb., 40c; lb., $1.25.**

CANTALOUPE

SUPERFECTO—An orange flesh, extremely thick meated, heavy netted round sort of medium size, and very good quality. **Pkt., 10c; oz., 20c; ¼ lb., 50c; lb., $1.50.**

LONG JOHN—Somewhat similar in quality and appearance to Bottomly, but much larger and more elongated. Has green flesh and commands good prices in the Baltimore market. **Pkt., 10c; oz., 20c; ¼ lb., 50c; lb., $1.50.**

CARROT

IMPERATOR (Also called Tendersweet)—One of the finest new carrots recently introduced. Grows 7 to 8½ inches long, measuring nearly 2 in. diameter at the shoulder and tapering to a semi-blunt end. Flesh rich orange throughout and of exceptional quality. Tops very dark and sufficient for bunching well. **Pkt., 10c; ¼ lb., 40c; lb., $1.25; 10 lbs., $11.50.**

CALIFORNIA BUNCHING—New introduction from California developed especially as a bunching carrot for long distance shipping. Roots about 1½ in. by 7 in. long, cylindrical stump rooted, deep orange color throughout, can be pulled before maturity or allowed to stand weeks later without becoming overgrown. **Pkt., 10c; ¼ lb., 50c; lb., $1.50; 10 lbs. $13.50.**

CORN

MANNS' EARLY SUPERIOR — This new variety is of remarkable size considering its earliness. The ears are 8 inches long and have 16 to 20 rows of rather narrow deep grains. The quality is excellent and the attractive appearance of the rich, tender, well-filled ears make it a very desirable sort for the Market Gardener. **Qt., 30c; pk., $1.50; bu., $5.00.**

MANNS' No. 56—The best, largest, most saleable early market corn we have ever known. It can be planted extremely early without danger of rotting, which makes it possible to produce marketable ears at least five weeks ahead of Stowell's Evergreen. Resembles sugar corn, an excellent shipper and a money maker. **Qt., 35c; pk., $2.00; bu., $6.00.**

PARSLEY

GREENCASTLE—We first offered this in limited quantities in 1933 and customers who tried it have already ordered sufficient for their entire 1934 requirements. In our trials we found it far superior in color, size, uniformity and yield to any other curled stocks. **Pkt., 10c; ¼ lb., 30c; lb., $1.00; 10 lbs., $8.50.**

PARSNIP

ALL AMERICAN—The outstanding parsnip in the All American Trials. The midwest market garden strain—true hollow crown—uniformally shaped. **Pkt., 10c; ¼ lb., 30c; lb., $1.00; 10 lbs., $8.50.**

LETTUCE

NEW YORK SPECIAL—Ten days to two weeks earlier than regular New York. Slightly smaller but more uniform in heading and greatly resistant to excessive heat. **Pkt., 10c; oz., 20c; ¼ lb., 50c; lb., $1.75.**

RUTABAGA

NEW CANADIAN—Grown for a number of years in the North and held very closely by private individuals, the seed of this variety has always been extremely difficult to procure in a true and reliable type. After three years of searching and checking in our trial grounds, we have found the correct strain and offer it with every assurance that it will soon become the only Rutabaga grown in this section. **Pkt., 10c; oz., 15c; ¼ lb., 40c; lb., $1.25.**

PEAS

NEW WILT RESISTANT VARIETIES—see page 24

TOMATOES

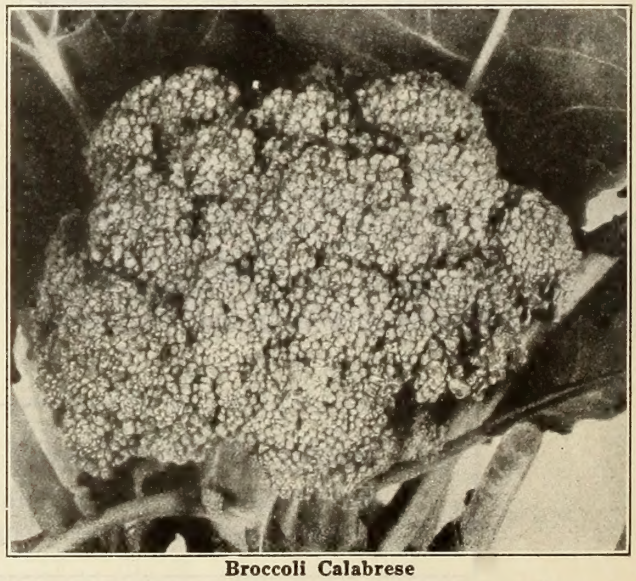
IMPROVED ADVANCE—An extra early, large tomato of high quality, round or slightly flattened shape, and exceptionally smooth for such an early variety. **Pkt., 10c; oz., 50c; ¼ lb., $1.50; lb., $5.00.**

MANNS' SPECIAL STRAIN BONNY BEST—Our special strain of Bonny Best has become a favorite among large growers for the early market. It is truly so superior to the ordinary stocks that it might rightfully be considered a new variety. **Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., $2.50.**

MANNS' SPECIAL MARGLOBE—This well known variety has been subjected to so many varying conditions and degrees of care in the matters pertaining to seed production that ordinary commercial stocks of it are far below the standard of the late Dr. Pritchard's original introduction. By using extreme care in rogueing, however, we have maintained the true Marglobe type, which is far superior to ordinary commercial stocks. **Pkt., 10c; oz., 40c; ¼ lb., $1.35; lb., $5.00.**

BROCCOLI

CALABRESE GREEN SPROUTING OR HEADING — The accompanying illustration shows the center head of Calabrese Broccoli greatly reduced. After this is cut, numerous sprouts develop, forming smaller heads which are also marketable. Broccoli is becoming very popular, commanding high prices, and should be grown more extensively by Maryland truckers. **Pkt., 10c; oz., 50c; ¼ lb. $1.50; lb., $5.00.**



Broccoli Calabrese

Transplanting Root Selected Stock Scarlet Globe Radish

Just another instance of extra care, extra labor and extra expense in order to produce seeds which will measure up to the high standard of Manns' Superior Quality

RADISH

SCARLET GLOBE FORCING—Manns' transplanted root selected stock. Ordinary commercial stocks of Radish are produced from seed without digging the roots for inspection. Manns' Transplanted Root Selected Stock, however, is grown from hand-picked roots, assuring perfection which cannot be surpassed. **¼ lb., 20c; lb., 60c; 10 lbs., $5.50; 100 lbs., $50.00.**

GLOWING BALL—see page 28

SPINACH

OLD DOMINION—A later seeding type of Virginia Yellows Resistant Savoy which stands 12 to 15 days longer, having about the same season of growth as our Extra Dark Green Savoy. With Old Dominion it is now possible to successfully grow an early spring crop on diseased soil, where it was previously necessary to take chances with the early seeding character of Virginia Blight Resistant. **Lb., 25c; 10 lbs., $2.25; 25 lbs., $5.25; 100 lbs., $20.00.**

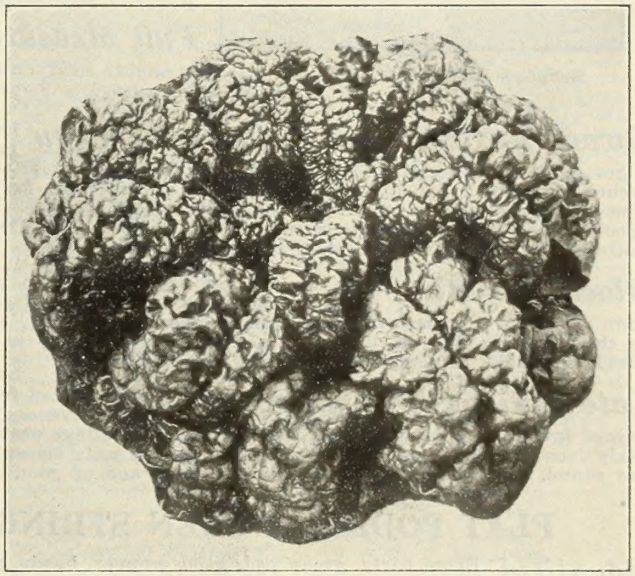
SOUTHLAND SUMMER—New special strain of Swiss Chard more closely resembling real Spinach, producing large heavily crumpled leaves of a bright green color. Will eventually replace New Zealand. **Pkt., 10c; oz., 15c; ¼ lb., 25c; lb., 75c.**

SORREL

NARROW LEAVED—Growing in favor with Market Gardeners in preference to the French Broad Leaved, on account of its long slender attractive bright green leaves. **Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., $2.25.**

SPINACH

We offer improved strains, grown in Holland by the originators of these strains; extensively imitated by other Holland growers, but universally recognized as the most superior types ever produced. See pages 30 and 31.



ASPARAGUS

1 ounce to 60 feet of drill; 1 pound per acre; 3,000 plants per acre.

Sow in spring in drills about eighteen inches apart and two inches deep in light, rich soil, planting fifteen to twenty seeds to each foot of row. Thin to about one inch apart and give frequent and thorough cultivation during the summer.

Set the plants about four inches deep and one to two feet apart in rows four to six feet apart. After the plants are well started, give frequent and thorough cultivation. Early the next spring spade in a heavy dressing of manure and about one quart of salt and double the quantity of fresh wood ashes to each square rod and cultivate well as long as the size of plants will permit, or until they begin to die down. The next season the bed may be cut over two or three times. After the final cutting, give a good dressing of manure, ashes and salt.

MARY WASHINGTON—Superior to Martha Washington and Washington Pedigree, in quality and equally resistant to disease. It is larger and earlier and produces remarkably tender dark green stalks with very compact purplish green tips. **Pkt., 10c; oz., 15c; ¼ lb., 30c; lb., $1.00.**

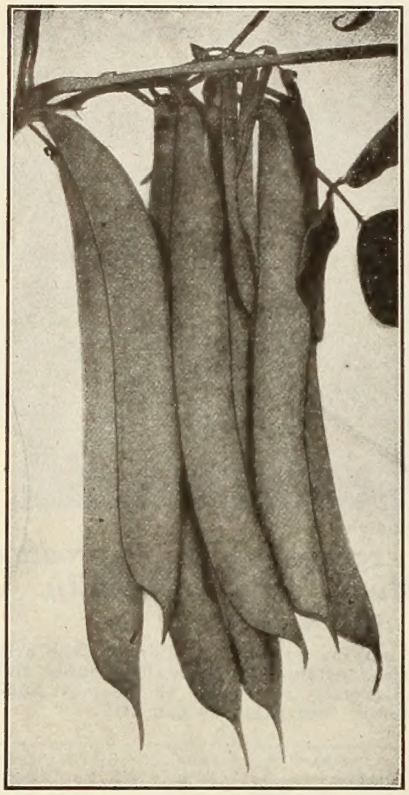
ASPARAGUS ROOTS

From one to two years may be saved by planting Asparagus roots instead of seed. Choice, 2-year-old roots, all leading varieties. $1.25 per 100; $8.00 per 1,000. MARY WASHINGTON, $1.25 per 100; $8.50 per 1,000.

ARTICHOKE

LARGE GREEN GLOBE—About 500 plants from 1 ounce. The scale-like leaves of the flower heads are used as a salad or boiled, making a delicious dish which is very popular with the French and Italians. **Pkt., 10c; oz., 50c; ¼ lb., $1.50; lb., $5.00.**

JERUSALEM OR TUBEROUS ROOTED—Grown exclusively for their large potato-like roots which are valuable for feeding hogs. **Price, ¼ pk., 45c; pk., $1.25; bu., $4.00. Expressage extra.**



Burpee's Stringless Green Pod

BUSH BEANS

1 pint to 100 feet of drill; 1 to 1½ bushels per acre.

Beans are tender and should not be planted until the soil is well warmed. Sowing too early will often result in a poor stand and uneven ripening. Sow the seed 1½ to 2 inches deep in rows not less than 18 inches apart and firm the soil to assist germination. Allow the plants to stand 4 to 10 inches apart in the row according to variety.

Shallow cultivating and hoeing should be done frequently until the vines are in blossom. To prevent blight do not cultivate deeply and avoid working them while the vines are wet. Beans grow best in a warm, well-drained, sandy loam. For succession plant every two weeks until about August 15th.

ROUND GREEN PODDED VARIETIES

Asgrow (Stringless Black Valentine.) Fully as early as the regular stringy Black Valentine but producing exceptionally long, oval or nearly round pods. Extremely prolific, entirely stringless, and of highest quality.

Burpee's Stringless Green Pod This variety has justly become very popular and can be profitably grown by either trucker or home gardener. It combines vigor, earliness and productiveness. The pods are produced in abundance and are handsome in appearance, being rich dark green in color, smooth, **absolutely round,** meaty, stringless, free from fiber, and of exceptionally delicate quality. Mature for picking condition in 45 days.

New Stringless Green Pod This new highly productive strain has many Full Measure characteristics bred into it. Its prolific nature, season of growth, length, roundness of pods and appearance, are definitely inherited and yet to these very desirable features has been added a wonderful degree of hardiness which helps New Stringless withstand adverse weather conditions better than its parent stock.

Giant Stringless Green Pod A very productive long, round-podded variety, longer and straighter than Burpee's Stringless.

Full Measure Stringless A second early, round-podded, stringless bean of recent introduction. The pods are straight, meaty, and are dark green in color. They are entirely stringless and measure 6 to 8 inches in length. Very prolific.

Dwarf Horticultural or Dwarf Cherry One of the best dwarf sorts for green shell beans for the home garden and market and can be used early as a snap bean. As a green shelled bean it is equal to the lima in quality while any surplus crop can be kept for winter use. The pods are 5 inches long, stout, flat and stringless. They are green at first changing as they mature to yellow splashed with carmine. The dried seeds are large, almost round, light buff spotted with dark red. Our special stock of this variety is superior to the old style Dwarf Cherry, being entirely stringless and free from runners.

Black Valentine This variety has proven itself to be the most hardy of all string beans. It will resist cold and wet better than any other sort and therefore can be planted extremely early and very late in the season. They should be picked as soon as ready as they will become tough if allowed to remain on the vines too long.

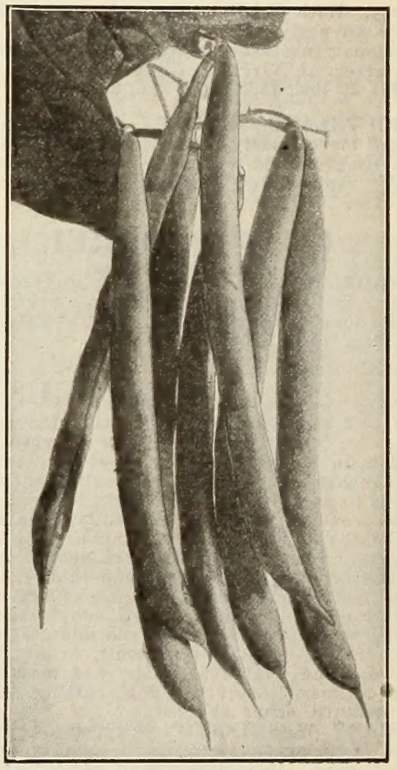
Late Refugee or Thousand-To-One Noted for its great productiveness, this variety has gained favor for canning and pickling. The dense foliage protects the pods from early frosts, thereby prolonging the season. The pods measure 5 to 5½ inches, are round, somewhat slender, almost stringless and of good quality.

FLAT PODDED GREEN STRINGLESS

Bountiful Extra early, green pod, good cropper, hardy, prolific; pods long, straight, thick-flat, entirely stringless, good quality. The best extra early, semi-round variety.

PRICES GREEN PODDED VARIETIES	Pt.	Qt.	Pk.	Bu.
Asgrow—Stringless Black Valentine	$0.20	$0.35	$2.00	$7.00
Black Valentine	.20	.30	1.75	6.00
Bountiful	.20	.35	2.00	7.00
Burpee's Stringless Green Pod	.20	.35	1.75	6.50
Dwarf Horticultural or Dwarf Cherry	.20	.35	1.75	6.50
Full Measure Stringless	.20	.35	1.75	6.50
Giant Stringless Pod	.20	.35	1.75	6.50
New Stringless Green Pod or Tendergreen	.20	.35	2.00	7.00

Let us quote special price on large quantities



Full Measure

Increased yields result from Nitragin Inoculation

See Page 64

Block of Selected Pedigreed Stock Seed on Idaho Breeding Farm

WAX BEANS

Sure Crop Wax Decidedly better quality than Currie's Rust Proof but vine and seed very similar in appearance, and maturing about a week later. The pods are of a rich yellow color, growing an inch longer than Currie's and stringless at all stages of growth. The disease resistant qualities found in Currie's are duplicated in this variety and it is vigorous, hardy, and very productive. For quality use Sure Crop, while for earliness Currie's is better.

Currie's Rust Proof Wax This variety is not stringless, but being the earliest, hardiest and one of the most prolific of all flat wax-podded beans, has become a favorite among market gardeners and truckers. It is ready for picking in 42 days and the large, flat, straight pods which are of a bright golden yellow color make an attractive appearance when offered for sale. The vines are strong and upright, holding the pods well off the ground, their vigorous and hardy nature making them immune from rust, mildew or blight.

Round Pod Kidney Wax **(Brittle Wax.)** An excellent early round-podded variety of handsome appearance. Pods are long, straight, brittle, meaty; entirely stringless and of exceptionally desirable quality. The best round-podded wax bean for the home garden.

Burpees New Kidney Wax Resembles Wardwell's Kidney Wax, excepting that the pod is larger and thicker, though not so broad. Fairly productive and of high quality, stringless, very fleshy and brittle. Pods measure 6 inches and are of attractive, clear yellow color. Mid-season sort; not damaged by wet weather.

BUSH BEANS

VARIETIES USED AS SHELL BEANS

Dwarf Horticultural, Fordhook Favorite, and Davis' White Kidney Wax. Three very satisfactory shell bean sorts have been listed previously.

White Marrowfat This is a very prolific variety and has become a choice family sort both for green shells and dry beans. Pods are broad, about 5½ inches long, medium green changing to yellow, having large, clear, white seeds which cook very dry and mealy.

Royal Dwarf or White Kidney Excellent late variety, green, shelled or dry. Seeds are large, white, kidney shaped, and of fine quality.

Erfurt Special (New) If you grow Italian varieties of **FAVA, BROAD BEANS, ERFURT BEANS,** be sure to grow Erfurt Special this year in preference to any other variety. It is much earlier, extremely large and of excellent quality. **Qt., 40c; pk., $2.50; bu., $9.00.**

Broad Erfurt Of foreign origin and entirely different from any other variety, being larger than the ordinary lima, with much darker pods. This sort will prove profitable for market gardeners who have Italian and Spanish trade.

POLE BEANS

EDIBLE PODDED

For Cultural Directions See Pole Limas.

Burger's Stringless Green Pod or White Kentucky Wonder Bears large, brittle, stringless pods of excellent flavor, dark green in color. It resembles the Kentucky Wonder in form of pod but is much earlier, more productive and bears longer. Seeds white, fine for baking.

Kentucky Wonder or Old Homestead This old standard variety is extremely productive and of finest quality. It is early and produces round, green pods about 9 inches long. Splendid for use as snaps for the home gardener as it continues to bear for a long period. Seed light brown.

Horticultural Cranberry or Wren's Egg An old favorite, excellent both as a snap and shell bean. Medium early, producing large quantities of 5 and 6-inch pods which are broad, thick, and of fine flavor.

Lazy Wife One of the best general purpose pole beans; of superior quality as a snap, green shelled or dried bean. Pods, which are borne abundantly throughout the summer, are very easily gathered and entirely stringless, brittle, light green in color and of a mild, sweet flavor. Seed pure white, 6 to 8 in each pod.

Yard Long, Celestial or Asparagus Bean Somewhat of a curiosity and yet possessing excellent qualities. It is very prolific, absolutely rust proof and a rank grower. It will produce pods 18 to 24 and sometimes 30 inches long. An excellent table vegetable, the pods being tender, stringless and of a rich asparagus flavor.

PRICES

WAX VARIETIES	Pt.	Qt.	Pk.	Bu.
Burpee's New Kidney Wax	$0.20	$0.35	$2.00	$7.00
Currie's Rust Proof Wax	.20	.35	2.00	7.00
Davis' White Kidney Wax	.20	.35	2.00	7.00
Pencil Pod Black Wax	.20	.35	2.00	7.00
Round Pod Kidney Wax	.20	.35	2.00	7.00
Sure Crop Wax	.20	.35	2.00	7.00
Unrivalled Wax	.20	.35	2.00	7.00
POLE BEANS				
Burger's Stringless or White Kentucky Wonder		.35	2.25	8.00
Horticultural Cranberry		.35	2.25	8.00
Kentucky Wonder		.35	2.25	8.00
Lazy Wife		.35	2.25	8.00
	Oz.	Lb.		
Yard Long, Celestial	$0.10	$1.00		
BUSH BEANS				
Erfurt Special		.40	2.50	9.00
Broad Erfurt		.40	2.50	9.00
White Kidney		.35	2.00	7.50
White Marrowfat		.35	2.00	7.50

POLE LIMA BEANS

1 quart to 150 hills; 8 to 10 quarts per acre.

Pole beans do not bear as early as the bush varieties but they are more productive, their bearing season is longer and they are more easily gathered. They succeed best in a warm sandy loam which has been enriched with well rotted manure. If poles are used they should be set three to four feet apart each way. After the ground has become warm and dry, plant 4 to 6 beans to a pole and when well started thin out to 2 or 3 plants to a pole. By placing the seed eyes down they will germinate more quickly and for this reason are less liable to rot. Cultivate frequently but shallow.

Early Leviathan The Early Leviathan stands supreme because of its combined qualities, earliness, size and productiveness. The large, well filled pods are borne in clusters of five to ten and are spaced over the entire vine. They are well filled with large fleshy beans of excellent quality, delicate pale green in color.

Carpinteria A very desirable pole lima for the home and market garden, producing an abundance of large four-seeded medium green pods. The color is distinctive in having a decided greenish tint, an indication of very finest quality. The beans are thin skinned, delicious flavor and retain the distinctly green tinge even when dried.

Ideal One of the largest and most valuable of the medium late varieties, producing a tremendous crop of seven-inch pods, which are filled with five to six large beans of excellent quality. Seed large, ovid, flat white with slight greenish tinge. Splendid for market gardeners.

King of the Garden This is the best and most popular main crop variety. Vines are strong and vigorous; setting pods early and continuing to bear until frost. Is used extensively by market gardeners because of its very prolific nature and the immense size of the pods, which are very straight and handsome; of medium dark green color, broad, flat and filled with four or five large white beans of finest quality.

Challenger or Dreer's Pole Vigorous, productive, and quite early, producing pods which are much thicker than any other sort and filled with four thick beans so closely set that the ends are flattened. A favorite among market gardeners.

Early Leviathan

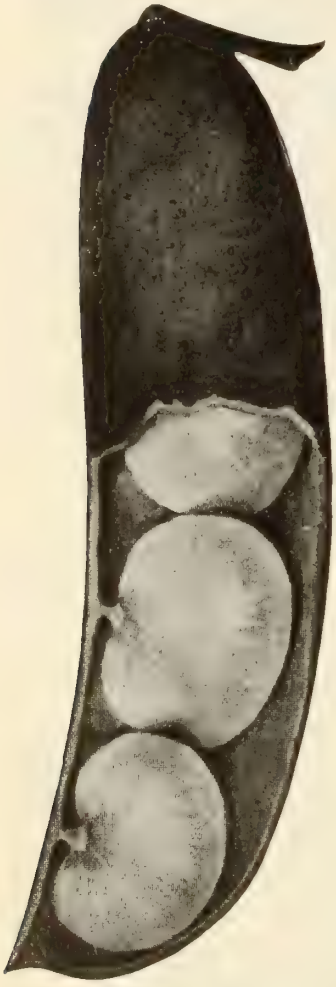
Giant Podded The largest podded lima in cultivation; extremely vigorous in growth, mid-season. Pods are borne in clusters of 6 to 8 and measure 7 inches long and 1½ inches broad. The beans are extra large and of excellent quality.

BUSH LIMA BEANS

Large seeded sorts, 1 qt. to 100 hills; 1 bu. to the acre.

Small seeded sorts, 1 qt. to 150 hills; 3 pks. to the acre.

These varieties require no support, are about two weeks earlier than the pole beans, and can be planted closer in the rows. They are therefore used by large growers and by gardeners who do not find it convenient to use poles. After danger of frost is past and the ground has become warm, plant in 3 foot rows dropping 3 seeds to a hill and the hills 15 inches apart.



Early Giant Bush

Early Giant Bush Lima The largest and earliest bush lima; two weeks earlier than Fordhook, very prolific and of excellent quality. Pods contain 4 to 5 large, close setting beans, and are borne in clusters of 5 to 8. Plant very vigorous and upright, often attaining a height of 30 inches.

Fordhook Bush Lima A most excellent variety and exceedingly popular with market gardeners. The plants are freely branching and very erect in their growth. Four or five large, very thick beans are contained in each pod and the plants continue to produce large quantities from July until frost. The green beans even when full size are tender, juicy and sweet when cooked.

Burpee's Improved Bush Lima A very prolific mid-season variety of very hardy, vigorous and true bush growth, bearing clusters of 5 to 8 pods measuring 5 to 6 inches long. The pods are borne abundantly, enormous in size and well filled with handsome beans which are both larger and thicker than those of the regular Burpee's Bush Lima.

Wood's Prolific or Henderson's Improved Bush Lima

A very early and vigorous type, producing an abundance of 3 to 4-inch pods; contain 4 small, flat, white beans of good quality.

BUSH LIMAS PRICES	Pt.	Qt.	Pk.	Bu.
Burpee's Improved Bush Lima	$0.25	$0.50	$2.75	$10.00
Early Giant Bush Lima	.30	.55	3.50	12.00
Fordhook Bush Lima	.30	.55	3.50	12.00
Wood's Prolific or Henderson's Improved Bush Lima	.20	.40	2.25	8.00
POLE LIMAS				
Carpinteria	.20	.35	2.25	8.00
Challenger or Dreer's Pole	.20	.40	2.75	10.00
Early Leviathan	.20	.35	2.25	8.00
Giant Podded Pole	.20	.35	2.25	8.00
Ideal	.20	.35	2.25	8.00
King of the Garden	.20	.35	2.25	8.00

Detroit Dark Red Beets

Manns' New Ruby Gem Is a beet of genuine quality and real beauty. As early as Crosbys Egyptian, extremely dark red and not a purple or brown root in the lot. The most critical produce buyer will be pleased with its intense color, perfect shape and freedom from zones. It has plenty of tops for bunching and while it is also an excellent canners variety it should not be confused with the various "all purpose" sorts developed mainly for packing house purposes.

Crosby's Egyptian Smooth, globe shaped, deep red in color, tender, sweet and richly palatable when served. This should not be confused with Flat Egyptian as it is similar only in point of earliness.

New Model Perfect in shape and of a beautiful red color, very uniform in shape and size, the entire crop maturing during the same week. Forces well under glass. This variety fills a definite need among the market gardeners and has met with success. Practical growers realizing the superior quality of this strain are ordering in 25, 50 and 100-pound lots, using this one variety throughout the entire season. Being entirely free from white zones, extremely dark, smooth, with short tops and excellent quality, it always commands the highest market price.

BEETS—MANGEL AND SUGAR

Sow 1 ounce to 100 feet of drill, 6 pounds to the acre in drills and 15 to 20 pounds to the acre is sown broadcast.

Plant from middle of May to middle of June in drills about 2½ feet apart and 1 inch to 1½ inches deep. When the plants are about three inches high begin thinning out and continue at intervals until they stand 8 inches apart in the rows.

Mammoth Long Red Attains enormous size, producing thirty to fifty tons per acre. The roots are straight, well formed and much thicker than other sorts. Grows well above the ground and is therefore easily gathered. The flesh is white tinged with rose. Highest feeding qualities.

TABLE BEETS

1 ounce to 50 feet of drill; 5 pounds per acre.

The soil for beets should be light, rich, fine and deeply cultivated. Smooth beets cannot be grown if fresh manure is used. If wanted very early, sow in hot beds and transplant, cutting off the outer leaves. For early outdoor crop plant the seeds about 1 inch apart and 1 inch deep in rows 1 to 2 feet apart, firming the soil about the seeds by walking on the row. This should be done as soon as the ground can be worked and for table use, plantings should be made every three weeks. Thin out the plants to 3 inches apart. For main crop sow in the early part of May while for winter use they may be planted up to July 1st.

Extra Early Flat Egyptian One of the very earliest, excellent for forcing and early crop. Roots are distinctly flat, very dark red, have very small tap root and are of fine quality when young. They measure 2 inches in diameter when mature and have very small tops.

Manns' Early Spring Being extremely early, of a wonderful dark red color, and of exceptional quality, Manns' Early Spring Beet offers an unusual opportunity for profitable production.

Detroit Dark Red Careful comparison with other prominent strains of this variety show that our stock is unsurpassed in quality and appearance. The tops are small and upright in growth and the roots are globular, of medium size, very smooth and of a wonderful dark red color throughout. Very desirable for canning.

Ohio Canner An excellent packers variety developed at the Ohio Experiment Station. Grows to about 1½ inch diameter and remains that size for several weeks. A Detroit Dark Red type but not having sufficient top to be a satisfactory bunching sort.

Good For All A new selection of Detroit Dark Red grown in California and claimed to be equally suitable for garden, shipping and canning.

Early Wonder Popular bunching variety in some sections where a light colored beet is desired, and white zones are not objectionable.

BROCCOLI

Calabrese Green Sprouting or Heading

This plant is somewhat similar to cauliflower in its nature of growth, but produces a large solid head which remains green. When this head is cut, numerous sprouts develop, forming small heads which command a fancy price among Italian trade. It is rapidly becoming popular and is being generally used in leading hotels because of its delicious, rich asparagus flavor.

Italian Green Sprouting (Turnip Salad Broccoli.) Known in the South as Salad Broccoli, grows more "greens" than seven top turnip and is fairly hardy in Maryland, making a profitable cover crop. Sow in August broadcasting two to three pounds per acre and the first sprouts will be ready for market during February or early March, at which time they usually command a very good price.

PRICES

BEETS	Pkt.	¼ Lb.	Lb.	10 Lbs.
Crimson Globe	$0.10	$0.25	$0.85	$7.50
Crosby's Egyptian	.10	.25	.85	7.50
Detroit Dark Red	.10	.25	.85	7.50
Early Wonder	.10	.25	.85	7.50
Edmand's Blood Turnip	.10	.25	.85	7.50
Extra Early Flat Egyptian	.10	.25	.85	7.50
Good For All	.10	.40	1.25	10.00
Mammoth Long Red	.10	.20	.50	4.00
Mann's Early Spring	.10	.50	1.25	10.00
New Model	.10	.25	.85	7.50
New Ruby Gem	.10	.40	1.50	13.50
Nutting's Gem	.10	.35	.90	8.00
Ohio Canner	.10	.50	1.50	12.50

BROCCOLI	Pkt.	Oz.	¼ Lb.	Lb.
Calabrese Green Sprouting or Heading	$ .10	$ .50	$1.50	$5.00
Italian Green Sprouting	.10	.15	.40	1.25

BORECOLE

Extensively grown in this section for marketing during the winter months, when other vegetables are scarce. Borecole should be grown like cabbage, the seed being sown from early spring to the middle of August. It is customary to pull off the lower leaves and let the plant grow on to furnish a continuous supply.

Curled Perfection An improved type, specially rogued and developed from a privately held American stock. Well curled and of a wonderful dark green color; winters well and commands top prices.

Hardy Winter This variety is one of the most salable and profitable sorts for either the home or market gardener. The plant attains a height of 18 inches and produces an abundance of beautiful light green leaves, which are densely curled and crimped. It is extremely hardy and has the additional advantage of putting forth a second crop of leaves after the first have been gathered or have fallen off.

Superior Extra Curled Green Scotch The leaves of this variety are very much more curled than the Dwarf-Green Scotch, and many more bushels per acre can be cut due to the extremely vigorous growth, which is characteristic of this variety. Nearly as hardy as Hardy Winter, and very popular with many of our customers.

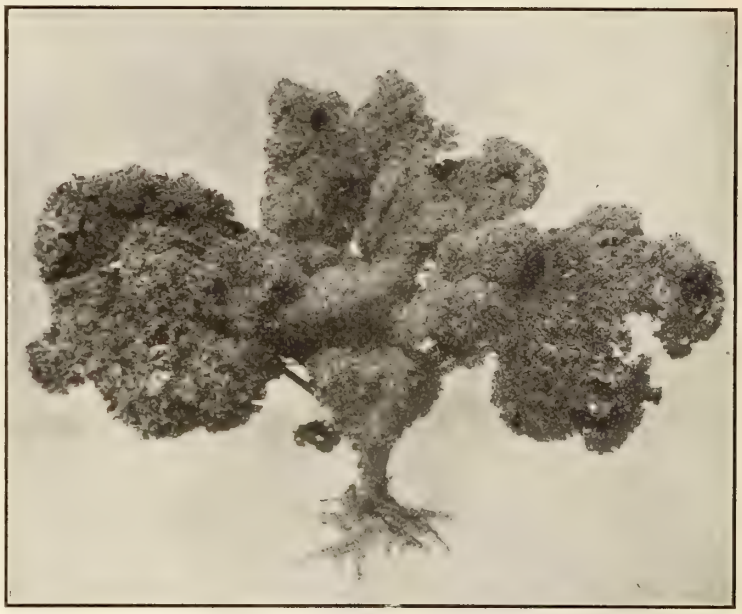
New Blue Curled Scotch Just as hardy as Hardy Winter and having very curly dark blue-green leaves.

Dwarf Green Scotch This excellent sort is low spreading and compact in its nature of growth, forming a mass of leaves which are beautifully curled and mosslike in appearance. The color is an attractive bright green and the quality is excellent.

DANDELION

Improved Broad Leaved The best and earliest strain, forming a tuft of large broad slightly cut leaves.

Swiss Chard—Fordhook Giant



Borecole—Dwarf Green Scotch

BRUSSELS SPROUTS

1 oz. will sow 500 ft. of drills or 3,000 plants.

Sow in April for early crop or in early June for a late fall crop. Transplant to rows which are 3 to 4 feet apart, 18 to 24 inches apart in the rows. Will live through the winter without protection.

Danish Prize Found to be the best variety both in quality and productiveness. The sprouts develop very evenly over the entire stem, the lower sprouts being as tightly folded and as solid as those higher up.

SWISS CHARD

Plant the seeds the same as ordinary beet seeds but thin out at first to 6 inches apart, later to 1 foot apart. Ready for use in about 60 days.

Fordhook Giant The best Swiss Chard in cultivation, producing extremely large, heavily savoyed leaves of a beautiful glossy, very dark green color. The ribs average three inches broad and are pure white.

COLLARDS

Georgia, Southern or Creole The chief Southern variety for greens, growing 2 to 3 feet high and forming a large, loose, open head or cluster of leaves with a rather long stem. One ounce of seed will sow 300 feet of drill; two pounds per acre.

CHIVES

Chives are a small hardy perennial plant, resembling the onion in appearance and growing in clusters. They are grown for the young leaves, which are produced freely from early in the spring and give a mild onion flavor to sausage, salads and various dishes.

Variety	Pkt.	Oz.	¼ Lb.	Lb.
	PRICES			
BORECOLE				
Curled Perfection	$0.10	$0.15	$0.40	$1.25
Dwarf Green Scotch	.10		.25	.75
Hardy Winter	.10	.15	.40	1.25
New Blue Curled Scotch	.10		.30	1.00
Superior Extra Curled	.10	.20	.50	1.75
BRUSSELS SPROUTS				
Danish Prize	.10	.20	.60	2.25
SWISS CHARD				
Fordhook Giant	.10	.15	.25	.75
Lucullus	.10		.25	.75
CHIVES	.10	1.00	3.50	
COLLARDS				
Georgia, Southern or Creole	.10		.20	.60
DANDELION				
Improved Broad Leaved	.10	.40	1.35	4.50
Italian (Ciccoria Catalogna)	.10	.25	.75	2.25

CARROTS

1 ounce to 150 feet of drill; 4 pounds per acre.

Our stock is grown from choice selected and transplanted roots only, and are of the truest type and richest color money can procure.

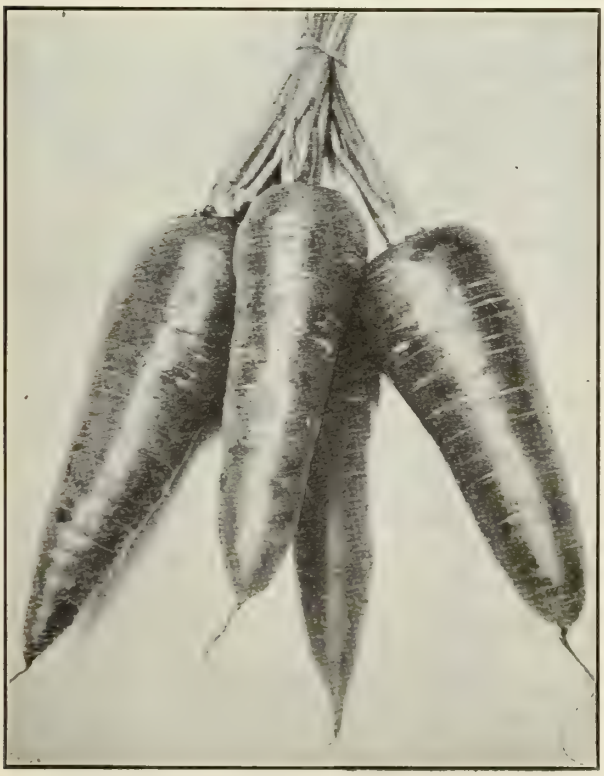
CULTURE.—Any good soil will grow this vegetable, but the most perfect roots, however, are developed in rich, friable soil, preferably sandy loam. The flavor and tenderness of the table varieties is secured by having a quick growth, which usually means good growing weather and proper cultivation. Sow as early as the ground can be worked or for late crop until the latter part of July, in drills 15 to 18 inches apart, finally thinning the plants to 3 to 4 inches in the drills. The seed is slow to germinate and if sown early or on moist soil, half an inch is deep enough. When sown during the hot summer months it is well to protect the seed bed with a thin layer of chips or straw as excessive heat will kill the vitality of the seeds before they germinate. After the seed has sprouted remove the covering, selecting the late afternoon for this work. Carrots are usually quite free from pests and diseases. The usual danger from ground worms and slugs is of course always prevalent, but once up they are easier to grow than most vegetables. They are ready for table use in about two months.

California Bunching See page 2.

Chantenay or Model Carrot A most excellent, medium early, half-long variety. Very uniform, stump-rooted but tapering slightly. They are smooth, deep orange-red in color and the flesh is very crisp and tender. Although a medium early sort the roots are suitable for use nearly as early as any, and will also prove very satisfactory if grown for winter use. Very easily harvested and bunched.

New Chantenay Produced from individual root selected stock, therefore a great improvement in uniformity of size and shape. The principal feature of this new strain, however, is its deep solid color.

Oxheart or Guerande Very stout and thick, ending in an abrupt small tap root, easily harvested and can be grown in very shallow soils where other sorts would not thrive. Quality excellent.



Sunrise

Chantenay

Sunrise This variety has become a favorite with our market garden trade because of its fine quality, perfect shape and attractive color. Sunrise has been found to be specially valuable for medium and late use, an excellent keeper and thoroughly dependable. It is of most perfect form, pointed-rooted, with a broad, high shoulder. For main planting this sort has no superior, and when sown during June may be depended upon to produce the very best crop of roots to store for winter.

Danvers Half Long This is an exceptionally fine Carrot for private and market garden use. It is slightly longer than Chantenay and our strain produces uniformly smooth and evenly sized roots of handsome appearance. They are orange-red in color and the flesh is sweet, crisp and tender.

Imperator or Tendersweet See page 2.

Coreless or Scarlet Nantes The earliest of its type; size and shape uniform; bright orange in color; smooth skin; small top.

Improved Long Orange A standard late variety, beautiful and uniform in shape, deep orange in color. The roots grow to a length of 12 inches and are of good quality for table use as well as for stock. They require a deep soil and if full size roots are wanted they should stand at least 8 inches apart in 18-inch rows.

PRICES

Variety	Pkt.	¼ Lb.	Lb.	10 Lbs.
California Bunching	$0.10	$0.50	$1.50	$13.50
Chantenay or Model Carrot	.10	.30	.90	8.00
Coreless or Scarlet Nantes	.10	.30	.90	8.00
Danvers Half Long	.10	.30	.90	8.00
Early Horn	.10	.30	.90	8.00
Imperator	.10	.40	1.25	11.50
Improved Long Orange	.10	.30	.90	8.00
New Chantenay	.10	.40	1.25	11.00
Oxheart or Guerande	.10	.30	.90	8.00
Rubicon	.10	.30	1.00	8.50
Sunrise	.10	.50	1.50	12.50

Individual plants covered for self pollination.

The Breeding of character and quality into our cabbage and other varieties of seeds is your assurance of successful crops.

CABBAGE

1 oz. for 2,000 plants; ¼ lb. per acre.

CULTURE.—The best results are obtained from a well-drained, deep rich loam. The very early varieties should be sown about September 15th and in 4 or 5 weeks transplanted to coldframes, from which they are transplanted to open ground from March 15 to April 15. If this is not done the seed should be sown in hotbeds in February; making plantings later of course according to variety and time crop is wanted. The earliest sorts should be set out in rows 2 feet apart and 18 inches apart in the rows.

If it is not especially desired to have early cabbage the seed may be sown in open ground and transplanted after 4 weeks. For second early crops sow in April and transplant in May; these will mature in July and August. The later varieties should be planted in May and transplanted in July to rows 3 feet apart and 2 feet apart in the rows; these will mature from September to November.

New Selected Jersey Wakefield

Yellows Resistant Varieties marked *

Please read general description, page 1.

FIRST EARLY SORTS

Extra Early Express Earlier than Jersey Wakefield, smaller and less compact, but often a very profitable crop.

New Selected Jersey Wakefield An improved strain of Early Jersey Wakefield, grown and selected with the greatest care; there is none better. Plant compact and erect or very slightly spreading, with few outer leaves, which are smooth, thick, nearly oval and light green. Stem short. Heads of medium size, very solid, uniformly pointed and of excellent quality.

****Jersey Queen*** The yellows resistant Jersey Wakefield.

Charleston or Large Wakefield Produces larger and less pointed heads than Jersey and a week or two later in maturity.

Golden Acre Matures earlier than Jersey Wakefield, forming a large round, solid head resembling Copenhagen Market; very uniform, and compact, having few outer leaves which permits close planting. Golden Acre commands very high prices.

Copenhagen Market This very fine, large round headed variety is of Danish origin and has proven to be very valuable to the American grower. It is nearly as early as Jersey Wakefield. The heads average about 10 pounds, and the stems are very short.

****Marion Market*** Yellows resistant Copenhagen.

New Leader Very early flat heading sort forming small solid heads, very early but developing larger heads if allowed to stand.

Glory of Enkhuizen Large sure heading, dark green variety, globular, very hard and solid, few outer leaves, excellent quality.

CABBAGE

SECOND EARLY SORTS

Volga One of the earliest main crop cabbages of superior quality. Very desirable where a large, uniformly round head with short stem and compact growth is wanted. Sure to produce a crop under difficult conditions, good keeper.

All Head Early or New Early Remarkably solid and uniform in color as well as in shape and size, its sure heading qualities and tenderness make it a favorite for the home garden. By reason of its compact growth, it is possible to produce 1,000 more heads per acre than many other good sized varieties. For winter use sow in July. Splendid sort for kraut making.

Early Flat Dutch Excellent large early flat sort, producing solid heads that mature with Early Summer. The stem is short and it has comparatively few outer leaves. Compares favorably with Large Late Flat Dutch but much earlier and smaller.

American Drumhead Savoy This is the finest of the Savoy class and very distinct from all other sorts. It forms the hardest heads and is the best for either early or late crops. The leaves are heavily crimped or savoyed and grow closely about the large, solid, dark green heads. The flavor is far superior to that of other cabbages, and for this reason is very much in demand. It is an excellent keeper and very hardy. Entire "pits" of it will keep in perfect condition until May.

Early Summer Heads medium in size, round, somewhat flattened, compact and solid; outer leaves spreading and light green in color. Ten days later than Jersey Wakefield, and one of the best large second early sorts.

Henderson's Succession The best very large midseason cabbage, about a week later than Early Summer but much larger and can be planted closer because of its compact growth. It is sure to head, very uniform in habit and the quality is excellent.

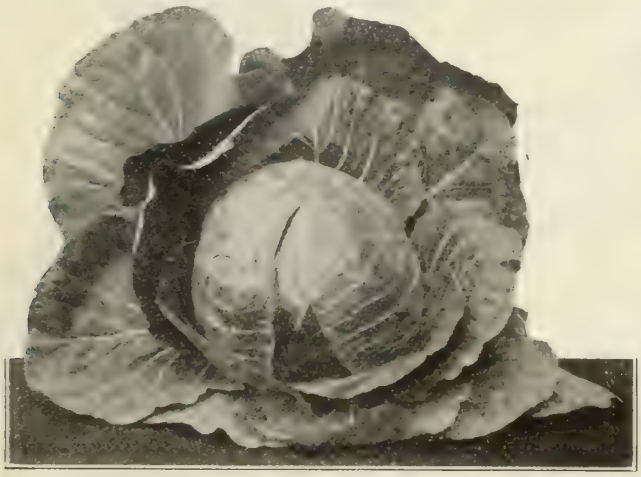
All Seasons A reliable variety to use when only one planting of cabbage is made. It is equally as good for fall and winter as for summer use. Nearly as early as Early Summer and much larger heads of the best quality are produced.

****Wisconsin All Seasons*** Yellows resistant, all seasons.

Sure Head Extremely popular with the private gardener because of the sure heading qualities and the remarkably large, uniform, heavy heads. A good keeper and one of the best for late crops.

Danish Ball Head or Hollander A very hardy sure heading, heavy variety, which has proven to be the best keeper and the most desirable for distant markets. Exceedingly hardy and standing dry weather very well.

****Wisconsin Hollander Yellows Resistant***
A disease resistant strain of the Danish ball head type, very large, hard, sure heading.



Golden Acre

American Drumhead Savoy

New Danish Round Head Compared with Danish Ball Head, has less outer foliage. The heads are larger in size and are set on shorter stalks, maturing two weeks earlier. They are extremely solid, of sweet flavor and tender texture.

LATE OR WINTER SORTS

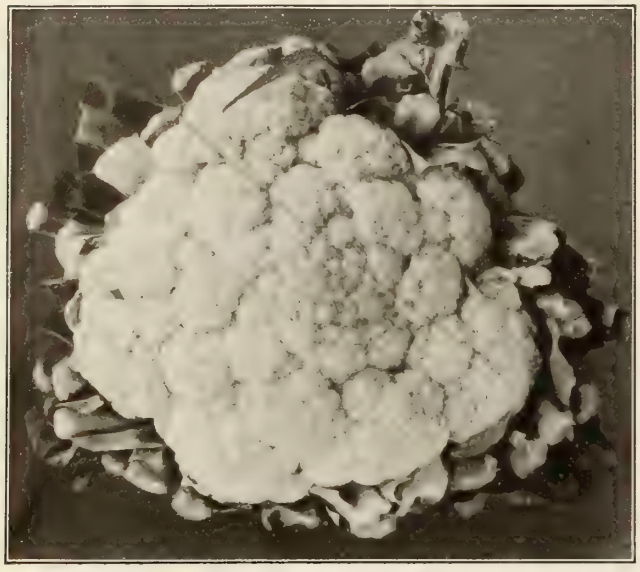
Houser Very popular with large cabbage growers in Pennsylvania. An extremely large, late sort, producing very hard round heads.

Premium Flat Dutch A very good variety for fall use or for making kraut. The heads are very solid, tender and of superior quality. They mature earlier than other late varieties but do not keep as well over the winter.

Extra Large Late Flat Dutch The best and most profitable late variety, possessing all the qualities a winter variety should have. It is hardy, vigorous, and high in quality. The heads are "as solid as a stone" and for that reason keep well for winter use. A favorite with the private gardener as well as the trucker.

PRICES

Variety	Pkt.	Oz.	¼ Lb.	Lb.
All Head Early or New Early	$0.10	$0.20	$0.60	$2.00
All Seasons	.10	.20	.60	2.00
American Drumhead Savoy	.10	.20	.65	2.25
Autumn King or World Beater	.10	.20	.60	2.00
Charleston or Large Wakefield	.10	.20	.60	2.00
Copenhagen Market	.10	.20	.65	2.25
Danish Ball Head or Hollander	.10	.20	.60	2.00
Early Flat Dutch	.10	.20	.60	2.00
Early Summer	.10	.20	.60	2.00
Eureka First Early	.10	.20	.60	2.00
Extra Early Express	.10	.20	.60	2.00
Extra Large Late Flat Dutch	.10	.20	.60	2.00
Glory of Enkhuizen	.10	.20	.65	2.25
Golden Acre (Original)	.10	.40	1.25	4.00
Henderson's Succession	.10	.20	.60	2.00
Houser	.10	.25	.75	2.50
Jersey Wakefield (New Selec'd)	.10	.20	.60	2.00
Lupton	.10	.20	.60	2.00
Mammoth Rock Red	.10	.25	.85	3.00
New Danish Round Head	.10	.25	.75	2.50
New Leader	.10	.20	.60	2.00
Premium Flat Dutch	.10	.20	.65	2.00
Sure Head	.10	.20	.60	2.00
Volga	.10	.20	.60	2.00
Yellows Resistant Varieties	**Pkt.**	**Oz.**	**¼ Lb.**	**Lb.**
Jersey Queen	.10	.40	1.25	4.50
Marion Market	.10	.40	1.25	4.50
Wisconsin All Seasons	.10	.40	1.25	4.50
Wisconsin Hollander	.10	.35	1.15	4.00



Early Snowball Cauliflower

CHINESE CABBAGE

Chinese or Celery Cabbage belongs to the cabbage family but more closely resembles lettuce. For best results plant the seed late in July or very early in August as spring plantings in this section are liable to bolt to seed. Plant the seed in the permanent bed and thin out to stand 12 to 15 inches apart.

Pe-Tsai Wong-Bok The finest Chinese Cabbage in existence. The heads are large, compact and the crisp, tender interior blanches to a creamy white. It will stand long before bolting to seed and is not injured by light frosts.

Chinese or Celery Cabbage

CAULIFLOWER

1 ounce to 2,000 plants.

For an early crop sow the seed either indoors or in a hotbed in January or February, transplanting them to 2 or 3 inches apart, thus allowing the plants to put forth a vigorous growth before being set in the permanent rows.

As soon as danger of freezing is over, set the plants in the open ground in rows 2½ to 3 feet apart and 18 inches apart in the row. Cultivate often and thoroughly. For fall crop sow the seeds during April or May. It is well to plan so that the early crop heads before very hot weather and the late crop matures after hot weather.

Early Snowball The best early variety in cultivation. If planted March 1st, large heads will be produced early in June, and scarcely a single plant will fail to form a head.

Dry Weather Cauliflower Especially adapted for growing in dry locations where other varieties fail. Easily blanched and remains fit for use for a long time.

Cauliflower Plants SEE PAGE 36.

PRICES

	Pkt.	Oz.	¼ Lb.	Lb.
Chinese Cabbage				
Pe-Tsai Wong-Bok	$0.10	$0.15	$0.50	$1.50
Cauliflower				
Dry Weather Cauliflower	.25	1.25	4.50	17.50
Early Snowball	.25	1.25	4.50	17.50
Celeriac				
Large Smooth Prague	.10	..	.50	1.75
Cress				
American Upland	.10	.15	.40	1.25
True Water	.10	.40	..	...
Chicory				
Witloof	.10	.20	.45	1.50
Large Rooted or Common	.10	.15	.35	1.25

CELERIAC

Sow seed and cultivate same as celery, with the exception that it is not necessary to blanch the plants. When the roots attain a diameter of two inches they are fit for use. To keep these through the winter, pack in damp earth or sand and store them in a cellar or leave them out of doors, covering with earth and straw for protection.

Large Smooth Prague One of the largest, very smooth and almost round with very few side roots. Plants are vigorous, with large dark green foliage.

CRESS

CURLED OR PEPPER GRASS

Sprinkle seed freely along shallow drills 1 foot apart at intervals through spring and summer, as desired.

American Upland This small salad is much used with lettuce.

True Water Thrives only when its roots and stems are submerged in water.

CHICORY

Witloof (French Endive)

A very choice winter salad, forced in hot-beds from roots; producing solid oblong heads blanched ivory white.

Large Smooth Prague Celeriac

French Golden Self-Blanching Celery

CORN SALAD

1 ounce will sow 20 square feet; 6 pounds to the acre.

Ackersalad Large Seeded Dutch. A vegetable used as a salad. It is sown in the opening of spring in rows 1 foot apart, and is fit to use in 6 or 8 weeks from sowing. If wanted in early spring, sow in September; cover with straw as soon as cold weather sets in. Can be grown in cold frames, covered with straw mats or shutters, and used any time during the winter.

POP CORN

Japanese Hulless The most popular variety. The pearly white grains pop free from hull.

Queen's Golden Yellow It pops pearfectly white, and produces very large flakes.

PRICES

Variety	Pkt.	Oz.	¼ Lb.	Lb.
CELERY				
Columbia	$ .10	$ .20	$ .50	$1.75
Easy Bleacher	.10	.20	.60	2.00
French Golden Yellow	.10	.50	1.50	5.00
Giant Pascal	.10	.20	.50	1.75
Golden Detroit (New)	.10	.35	1.25	4.50
Golden Heart	.10	.20	.50	1.75
Golden Plume	.10	.50	1.50	5.00
Golden Self-Blanching	.10	.35	.90	3.00
White Plume	.10	.25	.50	1.75
Winter Queen	.10	.20	.50	1.75
CORN SALAD				
Ackersalad	.10	.15	.40	1.25
POP CORN				
South American Giant (5 lbs., 35c)				.10

CELERY

1 ounce to 1,000 plants.

Celery seed is very slow to germinate and therefore should be started indoors in boxes from February to April or sown out of doors in a finely prepared seed bed during April. See that the seed is not covered too deep and that the bed is kept moist, almost wet until the seeds germinate. When the plants are about two inches high thin out and transplant to a distance of two or three inches apart each way. These must be kept entirely free from weeds and when they are four inches high the tops may be cut off so that the plants will grow more stocky. The plants are usually set out in the permanent bed when five inches high and it is usually best to do this during July or the first of August. In some sections best results are obtained by transplanting in June.

The permanent beds should be thoroughly prepared and well enriched with rotted manure, which should be spaded in deeply, the rows being spaced 3 to 4 feet apart. Cut off some of the root and set the plants 8 to 12 inches apart in the rows, firming the soil tightly, and cultivate them frequently for a period of six weeks. Celery needs plenty of moisture.

When the plants are nearly full grown they should be blanched. This is done by drawing the soil closely about the plants to about two-thirds of their height, being careful not to allow any of the earth to fall between the leaves. Repeat this process every few days until only the top of the leaves are visible. Do not disturb the plants while they are wet or the soil is damp as this is liable to result in injury from rust.

Golden Plume This new strain of Golden Self-Blanching has been pronounced by authorities to be the best of all the early varieties. It matures two or three weeks earlier than any other sort, blanches more quickly and shows less tendency to blight or crown-rot. Distinctly larger and ranker in growth than Golden Self-Blanching; more plainly ribbed and does not grow hollow. The crisp, tender stalks are very broad and the large full plumed centers are displayed to advantage. Combining the assets of earliness, finest quality and appearance Golden Plume offers a splendid opportunity to Market Gardeners. Celery Growers in New York and New Jersey have met with tremendous success using this variety.

French Golden Yellow Self-Blanching (Originator's Stock.) Our strain of this very popular sort cannot be excelled in quality or appearance. The plants are of medium size, compact and stocky, with yellowish green foliage. The stalks are solid, crisp, tender, free from strings and of a fine nutty flavor.

Easy Bleacher Two weeks later than Golden Self-Blanching. Blanches readily and is a great favorite with Southern growers who usually plant a full crop of this one sort. Vigorous in growth and a splendid keeper.

Winter Queen Of medium height, an excellent winter keeping sort, producing thick creamy white stalks which are broad, very solid and crisp. The hearts are large and it blanches well.

Golden Heart A distinct variety of sturdy dwarf habit. It is solid, and an excellent keeper, and of fine nutty flavor. When blanched, the heart, which is large and full, is of a light yellow, making it exceedingly showy and desirable for either market or private use.

Columbia An exceptionally fine, early variety. The plant is of medium height, but very stocky, foliage is a light shade of green with yellow tinge, and the stalks are thick, almost round, and resemble Giant Pascal in shape, but are of a rich, yellow color.

Giant Pascal A superior keeping sort. The stalks are very large, thick, solid, crisp and of rich nutty flavor; it blanches very easily and quickly, and retains its freshness a long time.

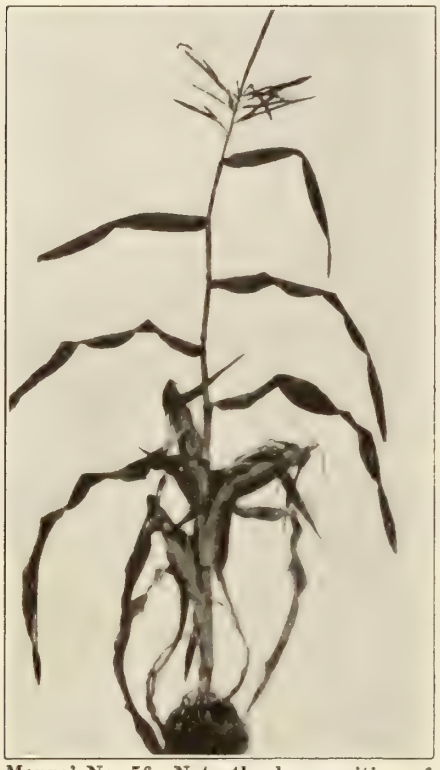
CELERY PLANTS

All Leading Varieties

Ready During July and August

SEE PAGE 36

USE A
FELINS VEGETABLE TYING MACHINE
Described on Page 47



Manns' No. 56—Note the low position of the ears, an evidence of extreme earliness.

CORN—Table Varieties

1 quart to 200 hills; 1 peck per acre.

Sugar Corn should not be planted until May, or when the ground is warm. For succession, plant about every two weeks until the last of July. All varieties may be either sown one inch deep in rows three to four feet apart, the seeds being placed about 8 inches apart in the rows, or they may be planted in hills at distances of three or four feet apart each way, allowing not more than 3 plants stand to a hill. The size of the variety and the richness of the soil should determine the distance of planting. Cultivate frequently and thoroughly but shallow until the tassels appear.

EXTRA EARLY

First Early Neck This variety can be planted earlier than any other sort; ear short, grain white. It is not a Sugar Corn.

Improved Early Adams A distinct improvement over the Old Early Adams, fully as hardy; ears measure from 10 to 14 inches in length, with 12 or more rows to the ear. Grains are narrow and deep, of excellent table quality.

Manns' No. 56 The best, largest, most saleable early market corn we have ever known. It can be planted extremely early without danger of rotting, which makes it possible to produce marketable ears at least five weeks ahead of Stowell's Evergreen. Resembles sugar corn, an excellent shipper, and a money maker.

Early Superior This new variety is of remarkable size considering its earliness. The ears are 8 inches long and have 16 to 20 rows of rather narrow deep grains. The quality is excellent and the attractive appearance of the rich, tender, well-filled ears make it a very desirable sort for the Market Gardener.

Golden Sunshine Most popular and earliest of all Golden Bantam types.

Red Cob or Ninety-Day Corn A distinct sort of white Corn; matures in about 90 days; produces large, handsome ears. It can be used green as a table corn or when dry for stock feeding.

MEDIUM EARLY

Howling Mob Stalks are of strong, vigorous growth, 5 feet in height; produces 2 large ears of sweetest quality.

Sheffield This cross-bred early variety combines the robust growth and extreme hardiness of the **Extra Early Adams** with the finer sugary quality of the **Cory**. Ears average 7 inches long, and are well filled with grains of medium size, arranged in 10 or 12 regular rows.

Kendel's Early Giant Remarkably large ear for a second early sort and very popular. The ears are about 8 to 9 inches long, 12-rowed. The grain is rather broad and shallow and the quality very good.

Black Mexican Although the ripe grains are bluish-black, they are remarkably white when in roasting ear stage; tender and of fine quality.

Country Gentleman Very deep grains, small cob and exceedingly rich flavor. Often produces 3 to 4 ears to the stalk. The grains are "staggered" on the cob, leaving no signs of rows.

Early Evergreen Ripens 10 to 12 days in advance of Stowell's Evergreen, and is equally as good in quality. Kernels sweet and tender; cob small, with irregular rows.

Early Mammoth Resembles the late Mammoth; ears are fully as long, but more tapering; ripens 2 weeks earlier.

MAIN CROP AND LATE

White Evergreen A pure white strain of the popular Stowell's Evergreen. The ears are very large and well filled from butt to tip with long, slender, pure white grains.

Stowell's Evergreen Extra Selected Grown more extensively than any other; a favorite with canners and market gardeners for late use. Ears of large size, kernels very deep, tender and sugary; very productive and remains for a long time in fit condition for table use.

Late Mammoth Produces larger ears than any other Sweet Corn; very weighty, profitable for growers selling by ton.

Mr. Adam Horn, an expert corn grower, always plants Manns Extra Selected Stowell's Evergreen

PRICES

Variety	Pt.	Qt.	Pk.	Bu.
Adams' Early	$0.10	$0.20	$1.00	$3.25
Black Mexican	.15	.30	1.35	4.75
Country Gentleman (Shoe-Peg)	.15	.30	1.35	4.75
De Lue's Golden Giant	.15	.30	1.50	5.50
Early Evergreen	.15	.30	1.35	4.75
Early Mammoth	.15	.30	1.50	5.50
Early Superior	.20	.35	2.00	7.50
First Early Neck	.15	.30	1.25	4.50
Golden Bantam	.15	.30	1.35	4.75
Golden Sunshine	.20	.35	2.00	7.50
Howling Mob	.15	.30	1.35	4.75
Improved Early Adams	.10	.20	1.00	3.25
Kendel's Early Giant	.15	.30	1.50	5.50
Late Mammoth	.15	.30	1.35	4.75
Manns' No. 56	.20	.35	2.00	7.50
Narrow Grain Evergreen	.15	.30	1.35	4.75
Red Cob or Ninety-Day Corn	.10	.20	1.00	3.50
Sheffield	.15	.30	1.50	5.50
Stowell's Evergreen Ex. Selec'd.	.15	.30	1.35	4.75
Trucker's Favorite	.10	.20	1.00	3.50
White Evergreen	.15	.30	1.35	4.75

FIELD CORN

The stock we offer has been especially grown and selected for seed purposes

Clark's Early Smoky Dent This new introduction has been developed by one of the largest and most reliable growers of corn in this country. Early Smoky Dent is today the earliest Dent Corn in cultivation, maturing in 75 to 80 days; is a good yielder and entirely free from disease; grows strong, quick, and has splendid 7 to 8 foot fodder. **Pk., 75c; bu., $2.50.**

Golden West This variety will yield a larger crop than any other yellow corn in existence. It is vigorous in growth, very deeply rooted and produces broad-leaved stalks of medium height. It is most attractive in appearance, and the ears usually have 18 to 20 rows of large kernels which are tightly wedged to make a solid ear. It requires about 100 days to mature and deserves the attention of any grower who wants a big crop of fine quality yellow corn. **Pk., $1.00; bu., $3.50.**

Pride of the North Maturing perfectly in 90 days and being very hardy and prolific. Pride of the North has become a favorite among Northern growers and planters needing a 90-day yellow variety. The ears are of medium size with very small red cob. The kernels are closely set, long and compact. **Pk., 75c; bu., $2.50.**

Leaming Improved Dent A very popular and extremely productive variety. On good lands the stalks grow tall, producing two good ears to each stalk. The ears are long, with small red cob well filled with grains of medium size, but deep, of a rich golden color. It ripens with us in from 100 to 110 days and makes a good crop. **Pk., 75c; bu., $2.50.**

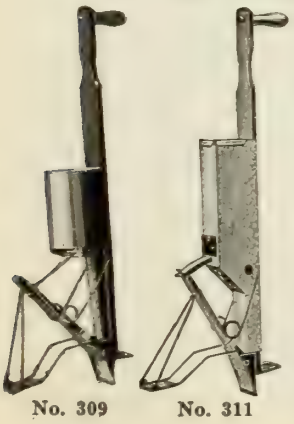
Iowa Silver Mine **The National White Corn.** A remarkable drought resister and under adverse conditions seems to pull through and make a crop where other varieties fail. Silver Mine is deep grained, pure white, rough-topped, with a small, white cob. Ears run from 9 to 12 inches long, with 16 to 20 rows of pure white kernels. Stalks medium height, very leafy, with broad blades, frequently bearing two ears weighing 1 to 1½ pounds each. Iowa Silver Mine has probably taken as many sweepstakes and first premiums as any corn in existence. **Pk., 90c; bu., $3.00.**

Iowa Gold Mine With the expert farmer Gold Mine is known as medium early, between the 110 day and the extra sorts that mature in 85 days. It is a great producer and sure cropper. Ears are medium symmetrical. Color bright golden yellow. The grain is deep and the cob is small. **Pk., 75c; bu., $2.50.**

Improved Maryland Yellow Dent A cross with the Golden West and Maryland Yellow Dent, both well known varieties. Ears measure 12 to 15 inches in length with 14 to 18 rows of very deep grains closely placed on the cob. The strain has been fully established and will mean larger and more profitable crops to the grower. **Pk., 75c; bu., $2.50.**

Golden Beauty It is a large and broad-grained yellow corn. The ears of perfect shape with from ten to fourteen straight rows of grains. The cob is very small. **Pk., 75c; bu., $2.50.**

Use CROW REPELLENT and do less replanting.
$1 size treats one Bushel.



No. 309 No. 311

No. 311—Acme Segment Corn Planter

Automatic slide type, adjustable for number of Kernels and depth of planting. Has Chinese bristle brush cut-off. Can be used for beans. **$2.00.**

No. 309—Acme Rotary Automatic Corn Planter

Full rotary Drop; having adjustable cast disk or seed plates, and depth gauge. Extremely accurate; also plants beans and peas. **$2.50.**

Golden West

Lancaster County Sure Crop A great favorite with dairymen as a silage variety and also extremely valuable as a husking sort. Yields large crops even under adverse weather and soil conditions. Matures for silage in 90 days and for grain in 100 days producing long ears of deep large yellow grains. **Pk., 75c; bu., $2.50.**

Ried's Yellow Dent **Pk., 75c; bu., $2.50.**

Boone County White Boone County is a very large white corn, something like Silver Mine, but larger and later in maturing. Ears well filled out at both ends, cylindrical, 9 to 11 inches long, averaging 20 rows, some 18 to 22. Grain very deep, a little rough. Cobs white, of medium size. Matures in 110 to 120 days. **Pk., 75c; bu., $2.50.**

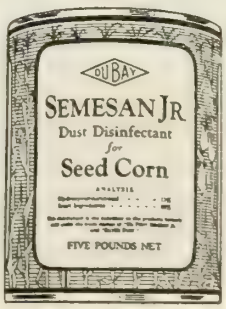
Maryland White Dent An old standard variety and great favorite of every farmer who has grown it. The stalks are of a strong growth, bearing from one to two large ears, which have 10 to 12 rows to the cob. Grain is pure white and of fine quality. **Pk., 75c; bu., $3.50.**

Improved Hickory King Largest grains of any white variety. Matures early and very productive. Ears set low, are of large size, well filled, very deep grained. It produces well, even on light land. **Pk., 75c; bu., $2.50.**

Cuban Giant Ensilage Well known as the leading variety for the production of fodder. **Pk., 90c; bu., $2.50.**

Early Eureka Ensilage **Pk., 75c; bu., $2.50.**

Better Germination *and* Stand
LARGER YIELDS OF CORN *with* SEMESAN JR.



A simple, quick, inexpensive dust treatment with Semesan Jr. destroys harmful disease organisms on the seed, protects seed from rotting in cold, wet soil, controls seedling blight, reduces root and stalk rots, and generally increases crop yields. Harmless to seed corn. Does not slow up rate of drop. Only 2 ounces necessary per bushel of seed field or sweet corn. Costs only 2½c per acre.

PRICES

4-oz. can	$0.50
1-lb. can	1.75
5-lb. can	8.00

Longfellow Cukes grown by Mr. Thos. Rohe

CUCUMBERS

1 ounce to 100 hills.

CULTURE.—Plant as soon as the weather becomes settled in hills 4 feet apart each way, with 8 or 10 seeds in each hill, cover half an inch deep, smoothing the hill off with the hoe. Keep the soil well stirred, and when the plants are out of danger of insects, leave 3 or 4 plants to the hill. For pickles, plant from the first of June to the first of August. The fruit should be gathered when large enough, whether required for use or not, for if left to ripen on the vines, it destroys their productive uses.

New Dark Evergreen Retains its very dark green color for an exceptionally long period. Very prolific, of medium size, a wonderful shipper and a profitable market garden variety, as it is one of the very earliest of its type.

Klondike A favorite with market gardeners and shippers all over the country. The handsome dark green cucumbers average 7 inches long and 2 inches in diameter.

Early Fortune One of the best of the very desirable "White Spine" type. It was selected out of a field of Davis Perfect by reason of its outstanding qualities and the strain has now become so well established that large plantings do not show any variation either in plant or fruit. Early, very productive, and having unusual disease-resisting ability. Fruits are 8 inches long with very dark green skin and thick, firm flesh which is crisp and tender. Excellent shipper.

Long Green (Improved) Our carefully-selected strain, under favorable conditions, produces fruit averaging from 12 to 16 inches in length. Skin is a deep rich green, flesh solid, crisp and of excellent quality.

Japanese Climbing Vines are extra strong, vigorous; being a climbing sort, can be grown on trellises, etc.; valuable in small gardens. Very prolific, from 40 to 50 having been counted on single plants. Fruit long, round, of fine flavor.

Longfellow or Straight Pack This new variety was developed primarily for greenhouse culture; its quality, size and attractive appearance, however, have definitely established it as one of the best for outdoor production. The beautiful dark green cucumbers average 12 inches in length and are adaptable for packing in flats for the very highest class trade.

Clark's Special Profitable variety for Market Gardeners; 8½ to 10 inches long by 2½ inches in diameter, slightly tapered at the ends; very dark green, crisp and firm retaining its fine quality and handsome appearance even when shipped long distances.

Davis' Perfect As now selected, this popular new variety is well worthy of praise. The long, even fruits are of fine form, with an intensely dark rich green skin. With very few seeds, the solid white flesh is of superb quality for slicing. The vines are of strong growth and quite prolific.

Gherkins or Burr Very small, quite distinct from all others. It is grown exclusively for pickling, and should be picked when young and tender.

Davis Perfect

Part of a 4 Variety Cucumber Trial

PRICES

Variety	Pkt.	Oz.	¼ Lb.	Lb.
Arlington White Spine	$ .10	$ .15	$ .30	$1.00
Boston Pickling or Green Prolific	.10	.15	.30	1.00
Clark's Special	.10	.15	.30	1.00
Davis' Perfect	.10	.15	.30	1.00
Early Cyclone	.10	.15	.30	1.00
Early Fortune	.10	.15	.25	.90
Evergreen Extra Long White Spine	.10	.15	.40	1.25
Fordhook Famous	.10	.15	.30	1.00
Gherkins or Burr	.10	.15	.40	1.25
Japanese Climbing	.10	.15	.25	.90
Jersey Pickle	.10	.15	.25	.85
Klondike	.10	.15	.25	.75
Longfellow or Straight Pack	.10	.15	.30	1.00
Long Green (Improved)	.10	.15	.30	1.00
New Dark Evergreen	.10	.15	.25	.85
Woodruffs' Hybrid	.10	.15	.30	1.00

EGG PLANT

1 ounce will produce 1,000 plants.

Sow in March in hotbeds, and transplant when 2 inches high into a second hotbed, or let them remain and thin out to 4 inches apart. When the weather becomes settled, transplant into the open ground 3 feet apart each way. Good culture is quite as important as good seed. Work the ground deep, make it rich with well-rotted manure and hoe often.

Mammoth Smooth Stem A decided improvement on the New York Large Purple in quality, size and beauty. The plants are large and vigorous, leaves of a light green shade, stem smooth, fruit large, oval, early and of a fine deep purple.

Black Beauty The most beautiful and earliest of all large Egg Plants.

Florida High Bush Very vigorous and productive; of upright growth holding the fruit well off the ground; color light purple of oblong shape.

New York Improved Purple Oval shaped, thornless, dark purple color, and rich flavor.

Black Beauty Egg Plant

KOHLRABI

1 ounce will produce 1,500 plants.

This forms a bulb above the ground and its flavor is somewhat similar to Cabbage. Sow in April in rows 18 inches apart, thinning out to 8 inches between the plants.

Early White Vienna Excellent for forcing and of fine quality. The bulbs grow to the size of an apple when ready for use, and are a pale whitish green.

Early White Vienna

ENDIVE

1 ounce to 100 feet of drill, 3 pounds to the acre.

Ever White Curled Plants moderately dense; leaves coarser than those of the Green Curled, but the mid-rib is yellow and the leaves almost white.

Broad-leaved Batavian **(Escarolle)** Leaves broad and almost plain; color light green.

Green Curled This is the hardiest variety, and very desirable for the home and market garden. The deep green leaves are beautifully cut and curled, easily blanched and become very crisp, tender and fine flavored.

LEEK

1 ounce to 50 yards of drill.

Sow early in the spring in drills 1 inch deep and 12 inches apart, when about 6 inches high transplant into deep, rich soil, 5 inches apart; use a dibble and plant deeply, close to their leaves.

Monstrous Carentan Leek

Large London Flag A favorite market variety, of enormous size, leaves large and broad; flavor mild and pleasant.

Monstrous Carentan **OR SCOTCH CHAMPION.** Of extra large size; the leaves are fan-shaped, of a dark green color; the edible stem is 6 to 8 inches long and 3 inches in diameter.

FENNEL (Florence)

(Finocchia) In great demand with Italian trade and deserves to be more generally used. The leaf stalks are clustered in a bulb-like formation, and when these are about 1½ inches wide, the plants should be hilled up to about half their height.

KALE

Broadcast, 2 to 3 pounds per acre; 1 ounce to 200 feet of drill.

The Kales are more hardy than Cabbage, and make excellent greens for winter and spring use. For early spring use, sow broadcast in September and protect during winter. It may also be sown in April or May for later use.

Extra Curled Long Standing An improvement on the well-known German Extra Curled Kale; beautifully curled, of strong, vigorous habit, perfectly hardy and slow shooting to seed.

Kale, Extra Curled—Long Standing

PRICES

Variety	Pkt.	Oz.	¼ Lb.	Lb.
EGG PLANT—Black Beauty	$ .10	$ .30	$1.00	$3.50
Florida High Bush	.10	.30	1.00	...
New York Improved Purple	.10	.30	1.00	3.50
Mammoth Smooth Stem	.10	.30	1.00	3.50
ENDIVE—Broad-leaved Batavian	.10	.20	.40	1.25
Ever White Curled	.10	.20	.40	1.25
Full Heart Batavian	.10	.20	.45	1.50
Green Curled	.10	.20	.40	1.25
FENNEL—Florence	.10	.20	.50	1.50
KALE—Extra Curled Long Standing (10 lbs. $6.50)	.10	..	.25	.75
Siberian Kale (Extra Early) (10 lbs. $3.00)	..	..	.15	.35
KOHLRABI—Early White Vienna	.10	.20	.60	1.75
LEEK—Large London Flag	.10	.20	.60	1.75
Monstrous Carentan	.10	.20	.60	1.75

Tuccorado

LETTUCE

1 ounce to 2,500 plants; 3 pounds per acre.

Lettuce to be at its best should be grown rapidly, hence the soil should be made as rich and friable as possible by liberal manuring and thorough preparation. For early crop sow in a seed-bed in September or October and protect through the winter with cold frames, which should be removed as soon as danger of severe freezing is past. Lettuce in the open ground will stand some freezing but is killed by prolonged frost or frequent freezing and thawing. The seed may also be sown in hotbeds in March, and the plants, if well hardened, may usually be set in the open ground in April, maturing a crop much earlier than complete open ground cultivation would produce. If, however, it is not convenient to get the plants started either in the fall or early spring in hotbeds, the seed may be sown in open ground from the middle of April until July, selecting varieties suitable for the season.

The plants should stand 8 to 10 inches apart in the rows, and the rows should be about 18 inches apart.

All-Heart Lettuce A very bright green and attractive variety. It forms large, solid heads, composed of thick, smooth, very tender leaves, the inner ones finely blanched and all of the finest quality. It remains a long time in head before running to seed.

All Seasons One of the best all-head Lettuces, standing the hot sun to a remarkable degree, slow to seed. The outer leaves are a bright soft green; the finely-blanched inner leaves are a rich golden-yellow, tender and mild in flavor. The heads are broad and nearly flat at the top, they continue to increase in size for about two weeks after they are ready for use.

Baltimore Early Market In comparison with May King, it is earlier and free from the red tint; the outer leaves are a light green, with the entire head fully blanched to a rich buttery yellow tint, which makes it so attractive.

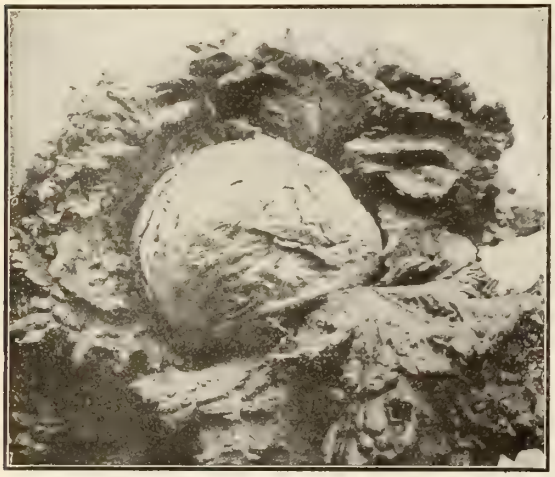
Big Boston This is a fine forcing variety for cold frames during the winter months, as it produces heads of very large size, often 12 inches or more across, and succeeds better in cooler temperature than most forcing strains. The large heads are beautifully blanched and of superior quality. It also heads well in the open ground during cool weather of spring and fall. Our seed is an extra selected strain of the true stock.

Black Seeded Big Boston In comparison with Big Boston, the leaves are a trifle smaller and rather lighter shade of green with less color on edges, producing larger solid heads, which are always tender and crisp, more compact and will stand shipping better. Excellent for forcing or growing in the open ground, spring or fall.

Earliest "Wayahead" Shows a remarkable combination of earliness, firm heading character, handsome appearance and fine quality.

Grand Rapids As a lettuce for greenhouse forcing this variety undoubtedly stands at the head of the list, being of quick growth, hardy, little liable to rot and remaining in condition several days after being fit to cut. Forms a loose cluster of large, thin, bright green leaves, savoyed, finely crimped at edges. Will stand shipping long distances.

Unrivalled



New York or Wonderful

PRICES

Variety	Pkt.	Oz.	¼ Lb.	Lb.
All-Heart Lettuce	$ .10	$ .20	$ .50	$1.50
All Seasons	.10	.15	.40	1.25
Baltimore Early Market	.10	.20	.50	1.50
Big Boston	.10	.15	.40	1.25
Black Seeded Big Boston	.10	.15	.40	1.25
Chicken (loose leaf)	.10	.15	.30	1.00
Cos, or Romaine, White Paris	.10	.15	.30	1.00
Cos, Extra Dark Green	.10	.15	.40	1.25
Earliest "Wayahead"	.10	.15	.40	1.25
Grand Rapids	.10	.15	.40	1.25
Hanson	.10	.15	.40	1.25
Iceberg	.10	.20	.60	1.75
Improved Mammoth Salamander	.10	.20	.40	1.25
Large White Loaf	.10	.15	.40	1.25
Manns' Defiance Summer	.10	.20	.60	2.00
May King	.10	.15	.40	1.25
New York or "Wonderful"	.10	.20	.50	1.75
New York—Special	.10	.20	.50	1.75
Tenderheart	.10	.20	.50	1.50
The "Deacon"	.10	.15	.40	1.25
Unrivalled	.10	.20	.50	1.75
White Boston	.10	.20	.60	1.75

LETTUCE (Continued)

Manns' New York or Wonderful is used by the largest commercial growers

Hanson The plant is compact and forms a large, flat, cabbage-like head, and is so slow to form a seed stalk that it often fails to seed at all. Outer leaves bright green, with prominent light-colored veins; inner leaves white and usually curved and twisted at the base; very tender and sweet; a favorite variety for home use.

Iceberg SEE NEW YORK OR WONDERFUL.

Improved Mammoth Salamander Grand mammoth hard-heading Cabbage Lettuce. Plants 12 inches across with extra large, solid round heads that are particularly rich and buttery in flavor; always well blanched and tender. The inner leaves are beautifully white and curled like a fine Savoy Cabbage. Splendid for summer use, both for the home table and for market. Most highly recommended.

Manns' Defiance Summer This variety, introduced by us several years ago, has made a very eventful impression upon the grower, as well as the consumer. It forms handsome, solid heads of enormous size, which remain in good salable condition long after all others have gone to seed. The flavor is excellent; the leaves are beautiful light green. Very profitable for market gardeners.

May King Extremely early, compact cabbage or heading variety, forming very firm heads of medium size and excellent quality. Color light yellowish-green, tinged with reddish-brown when mature. Inner leaves blanch rich golden-yellow, very tender and buttery.

New York Special Matures 10 days to two weeks earlier than regular New York, is slightly smaller in size and somewhat lighter in color, heads harder and more uniform. It withstands heat best of any of the New York or Iceberg types.

New York or "Wonderful" This variety is also known as the famous "Iceberg" of California, truly a wonderful lettuce. Plants of extra large growth, producing heads of immense size. Inner portion is beautifully blanched and stands for a considerable time before running to seed. Outer leaves a deep, rich green.

Tuccorado Being of very vigorous and hardy nature, this variety is especially desirable for fall or early spring sowing. Large handsome heads, solid, crisp and of superb quality.

Unrivalled This lettuce might well be called an Improved Big Boston. Its usefulness and value are identically the same as Big Boston, but it is preferred by market gardeners because of its being a solid green color with no brownish tinge at the border of the leaves; its heads are larger and of better appearance than Big Boston.

White Boston A very light green type somewhat similar in size, shape and uses to Unrivalled and Big Boston. Entirely free from red edge and gaining in popularity among market gardeners.

COS, ROMAINE OR CELERY LETTUCE

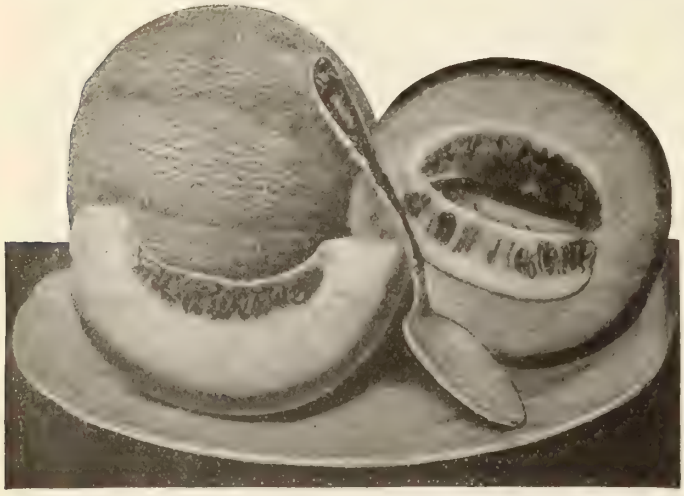
Paris Self-Folding White Cos

Grows to very large size, producing long-pointed, compact bunches. The outer leaves are closely folded about the center and interior is well blanched.

Paris Cos Lettuce

Cos, Extra Dark Green Similar to White Paris but darker in color.

LETTUCE PLANTS
FRESH DAILY IN SEASON—See Page 36



Bottomly Cantaloupe

MUSKMELON

CANTALOUPE

1 ounce for 50 hills; 3 pounds per acre.

The most suitable soil for melons is a warm, sandy loam, well worked and enriched with rotted manure. After danger from frost is over, sow ten to twelve seeds to a hill, about 2 inches deep; the hills being six feet apart each way. When the plants have the second pair of leaves and danger from insects is past, thin out to four plants to a hill. Cultivate frequently, deeply away from the plants and shallow close to them. When hoeing, remove the crust from around the plants and replace with fine, loose soil.

GREEN FLESHED VARIETIES

Knight's Early Maryland An extremely early medium sized melon. Fruit oblong, showing the neck tendency; skin deep green, turning to golden at maturity, well covered with a close gray netting and distinctly ribbed; flesh fairly thick and very sweet; color medium green blending to light pink near the center. The earliest high quality melon and a good shipper.

Bottomly Is planted exclusively by the foremost cantaloupe growers of Anne Arundel County. The most exacting will be satisfied by the delicious quality while its appearance exhibits all the refinement of form, color and netting so necessary to a good melon.

Sweet Air An early, well netted medium sized, good quality and good shipping sort; grown largely in Southern Maryland.

Thoroughbred Rocky Ford This has become one of the most popular of small or basket melons. The fruit is oval, slightly ribbed, densely covered with coarse netting. Flesh light green, very thick and highly flavored.

Long John Somewhat similar in quality and appearance to Bottomly, but much larger and more elongated. Has green flesh and commands good prices in the Baltimore market.

Honey Ball Possess characteristics that make it one of the finest melons that has ever been offered to the grower, the shipper and the consumer. Exceedingly prolific, producing as many as fifteen to twenty large cantaloupes to the plant. Every commercial grower and home gardener should have at least a trial patch of Honey Ball.

Honey Dew A melon of the Cassaba type. The fruit is large, oval in form, about 10 inches long and 8 inches in diameter; thick flesh is light green in color, ripening to the rind, very tender, with an extreme sweetness. The vines are vigorous and set 6 to 10 melons to the hill. An excellent shipper, will keep for several weeks even when fully ripe.

SALMON FLESHED VARIETIES

Early Imperial or Hale's Best. Thousands of acres of this vigorous and prolific variety are grown annually in the Imperial Valley of California for shipment to eastern markets, and being the very earliest of all high quality shipping melons, it should be grown extensively in Maryland and Virginia. The fruits average 7 inches long and 5 inches in diameter, are well netted and ribbed, and have very thick, salmon-tinted, fine grain flesh, which ripens clear to the rind. Its good, sweet flavor makes it equally desirable for the home garden.

Superfecto Of all the cantaloupes grown, this has the thickest salmon-colored flesh, and with a triangular seed cavity. It is of the characteristic cantaloupe size and shape; thoroughly covered with a fine netting.

Hale's Best See Early Imperial.

Burrell Gem Of sweet and aromatic flavor, oblong shape, smoothly rounded ends, closely netted and slightly ribbed dark green skin. Fruits average 6 inches long by 4 inches deep. Very fine for marketing.

Sugar Rock A valuable New Variety of a Distinct Type. Sweet as sugar and solid as a rock. Sells on sight and its marvelous flavor brings the buyers back for more. On account of its heavy netting and tough rind, can be thoroughly ripe before picking. A remarkable heavy yielder, and a real money maker.

CITRON

Red Seeded A small globular variety, striped and marbled with light green. Flesh white and solid; seeds red. Used exclusively for pickles and preserves.

PRICES

MUSKMELON	Pkt.	Oz.	¼ Lb.	Lb.
Bottomly	$ .10	$ .20	$ .45	$1.50
Burrell Gem	.10	.15	.30	.90
Early Imperial	.10	.15	.30	1.00
Golden Honey Dew	.10	.20	.50	1.50
Hearts of Gold or Hoo Doo	.10	.15	.30	1.00
Honey Ball	.10	.25	.75	2.50
Honey Dew	.10	.15	.35	1.25
Hoodoo	.10	.15	.35	1.00
Knight's Early Maryland	.10	.15	.40	1.25
Long John	.10	.20	.60	1.75
Schramm	.10	.20	.60	2.00
Sugar Rock	.10	.15	.40	1.25
Superfecto	.10	.20	.50	1.50
Sweet Air	.10	.15	.40	1.25
Thoroughbred Rocky Ford	.10	.15	.25	.75
CITRON				
Red Seeded	.10	.15	.35	.85

Imperial—Hale's Best

WATERMELON

1 ounce for 30 hills; 3 or 4 pounds per acre.

Cultivate exactly as for Cantaloupe, except that the hills should be 8 to 10 feet apart.

Kleckley's Sweet This very popular melon is one of the best for nearby markets. Fruits are medium size, oblong, of a dark green color and have very thin rind. Flesh bright scarlet with solid heart, crisp, sugary and melting, and entirely free from stringiness.

Tom Watson A large long melon with dark green rind and light crimson flesh of excellent quality, and a splendid shipper.

Stone Mountain The outstanding introduction in the last few years. Its growth in popularity is phenomenal. Can be shipped long distances and its edible qualities are distinctly superior to any other shipping variety.

Triumph A splendid shipping variety of large size and handsome appearance. The melons are rather shortened in form, but thick through. Skin deep bluish green, with dark-red flesh and of good quality.

Sweetheart Large heavy fruits of oval or round form; skin very pale green, with distinct netted lines of a slightly darker shade. The solid flesh is a deep rich red, crisp and melting; its luscious quality has made it a leading favorite in the Eastern markets.

Stone Mountain

Irish Gray The color is a distinct mottled greenish gray; the flesh is red, sweet, crisp, and free from stringiness. An unusual melon, for although a good shipper it is equally fine for the home garden.

Mustard

MUSTARD

Fordhook Fancy Darker green and leaves more curled at the edges than any other sort.

Giant Southern Curled The largest variety, forming a mass of finely curled leaves; hardy and vigorous.

OKRA OR GUMBO

10 pounds to the acre.

Sow in drills during April and May. Thin until plants are 12 inches distant, and draw earth to the stems for support.

Improved Dwarf Green Prolific or Density A distinct variety growing about 14 inches high. Grown in competition with the ordinary dwarf, it produces twice the number of pods, which are very smooth and beautiful.

White Velvet Pods are large, perfectly smooth.

Lady Finger Plants producing long, slender pods of pale green color.

Perkins' Mammoth Green Pod A splendid variety. Very prolific, with slender long green pods of best quality and most desirable color for canning.

Okra

PRICES

WATERMELON	Pkt.	¼ Lb.	Lb.
Florida Favorite	.10	.25	.75
Irish Gray	.10	.25	.75
Kleckley's Sweet	.10	.25	.75
Stone Mountain	.10	.30	1.00
Sweetheart	.10	.25	.75
Tom Watson	.10	.25	.75
Triumph	.10	.20	.60
OKRA OR GUMBO			
Improved Dwarf Green Prolific	.10	.20	.50
Lady Finger	.10	.20	.50
Perkins' Mammoth Green Pod	.10	.20	.50
White Velvet	.10	.20	.50

MUSTARD	Pkt.	Oz.	¼ Lb.	Lb.	10 Lb.
Fordhook Fancy	$ .10	$ .15	$ .25	$ .75	
Giant Southern Curled	.10	.15	.20	.50	$4.00

MUSHROOM SPAWN

English Mill Track Spawn: Bricks 30c; 10 bricks $2.75.

If sent by mail, add postage.

White Silver Skin Onion

ONIONS

To grow large bulbs 1 ounce to 100 feet of drill; 4 to 5 pounds to the acre. To grow sets 10 ounces to 100 feet of drill; 50 pounds to the acre.

The Onion must have a clean and very rich soil. Use well rotted manure freely, and get the seed in as early as possible in the spring, no matter if it is cold and unpleasant. If onions do not get a good growth before hot, dry weather, the crop is sure to be a failure. Keep the soil mellow and clear of weeds. Sow in shallow drills, not less than a foot apart nor more than half an inch deep. As onions grow on top of the ground, they may be allowed to remain pretty thick, no matter if they crowd each other. In hoeing, destroy weeds and keep the ground mellow; do not cover the young bulbs with earth.

White Silver Skin, or Portugal This is the most popular variety of all white Onions; is almost exclusively used for growing sets. It is a good keeper. The bulbs grow to good size, ripening early and quite evenly. The flesh is mild and sweet, the thin skin a clear silvery white, of handsome appearance if the bulbs are gathered as soon as ripened and carefully dried under shelter away from the strong sunlight. When seed is sown at the rate of 20 to 25 pounds per acre, it makes bulbs of suitable size and most desirable for pickling.

White Pearl Very fine and very early variety. Bulbs when well grown are large, round, flattened, with a delicate pure white skin; flesh very mild in flavor. In the South this variety is largely planted for sets.

Mammoth Silver King The large bulbs are of attractive form, flattened, but quite thick through, with silvery white skin, frequently measuring 20 inches in circumference. It matures quite early, coming just after Onions grown from sets are gone. Must be sown thinly to produce large onions.

Southport White Globe Pure white, true globe form with very crisp flesh, exceedingly mild and fine grained, usually commands highest prices.

Japanese One of the best for the production of large onions for Fall and Winter market, yielding almost twice as many bushels per acre than any other set onion. Somewhat similar to Flat Danvers in color and shape but a trifle thicker and very much larger in circumference. They are very mild, excellent keepers, rapid growers and very few go to seed. The appearance, size, quality and wonderful yields of this variety give it a prominent place among the most valuable sorts.

Prizetaker Produces large, well-ripened bulbs the first season from seed; flesh white; crisp and mild in flavor. The skin is thin, of a bright straw-yellow; form nearly a perfect globe. Under ordinary cultivation this variety will yield bulbs nearly three times as large as the Globe Danvers, while under special cultivation specimen bulbs have been raised to weigh from 4 to 5 pounds each.

Riverside Sweet Spanish or Valencia Resembles Prizetaker but grows to larger size. Very mild, has golden yellow skin and white flesh. Rapidly growing in popularity.

Yellow Globe Danvers Our superior stock of this celebrated variety is of fine round shape. It grows to good size, with thin yellow skin, white flesh, fine grained and excellent quality. It ripens early, keeps well and is very productive.

Danvers Yellow Globe

ONION SETS

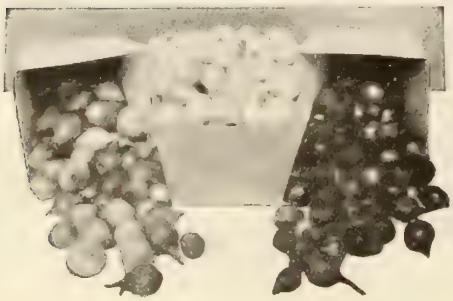
FINE QUALITY MARKET GARDENERS STOCK SCREENED TO ⅞ INCH

Use a

FELINS TYING MACHINE

FOR BUNCHING SPRING ONIONS

See Page 47



PRICES

Variety	Pkt.	Oz.	¼ Lb.	Lb.
Australian Brown	$ .10	$ .20	$ .50	$1.75
Japanese	.10	.20	.60	2.00
Mammoth Silver King	.10	.30	.80	2.75
Prizetaker	.10	.20	.50	1.75
Red Wethersfield	.10	.20	.50	1.75
Riverside Sweet Spanish	.10	.25	.75	2.25
Southport White Globe	.10	.25	.75	2.25
White Pearl	.10	.30	.80	2.75
White Silver Skin, or Portugal	.10	.20	.60	2.00
Yellow Globe Danvers	.10	.20	.50	1.75

ONION SETS	Qt.	Pk.	Bu. 32 lbs.
Japanese (Yellow)	$ .15	$1.00	$3.50
White Silverskin	.15	1.00	3.75
Yellow Danvers	.15	1.00	3.50

Prices subject to change. Postage Extra.

PUMPKINS

1 ounce to 15 hills; 4 pounds per acre, in hills 10 by 10 feet apart.

CULTURE.—Sow in good soil in May, when the ground has become warm, in hills 8 to 10 feet apart each way, or in fields of corn about every fourth hill; always avoid planting near other vines, as they will hybridize.

Sugar Pie Pumpkins This is the best of all Pumpkins for pies. The fruit is small to medium in size, flesh solid and fine grained, the seed cavity small, and it is a splendid keeper.

Quaker Pie It is oval in shape, and tapers toward each end; of a creamy color, both inside and out. Being fine grained and rich flavored, it makes a superior quality of pies.

Connecticut Field Used principally for feeding stock, shape almost round, of medium size, skin deep yellow and smooth, flesh yellow.

Cushaw, or Crookneck One of the most popular varieties to grow for pies as well as for stock feeding. Fruits 2 feet in length, with long, solid neck, most frequently curved in form; seeds are located in the lower bulb-like end. Skin striped with mottled bands of creamy white. Flesh rich, creamy yellow, tender and of exceptionally fine flavor.

Sweet Potato Excellent for pies, pear-shaped, medium sized, flesh and skin creamy white, fine grained, sweet and delicious; first-class keeper.

Japanese Pie Crookneck variety, with extremely small seed cavity; nearly all solid meat; quality extra fine; seeds distinct in appearance, being curiously sculptured in the manner of Chinese letters. Productive, ripens early, medium size, good keeper.

King of Mammoths This giant variety grows to enormous size. Deep yellow, glossy color. Splendid to grow for stock and exhibition purposes.

Sugar Pie Pumpkin

Mann's Parsley grown in N. J., under Irrigation

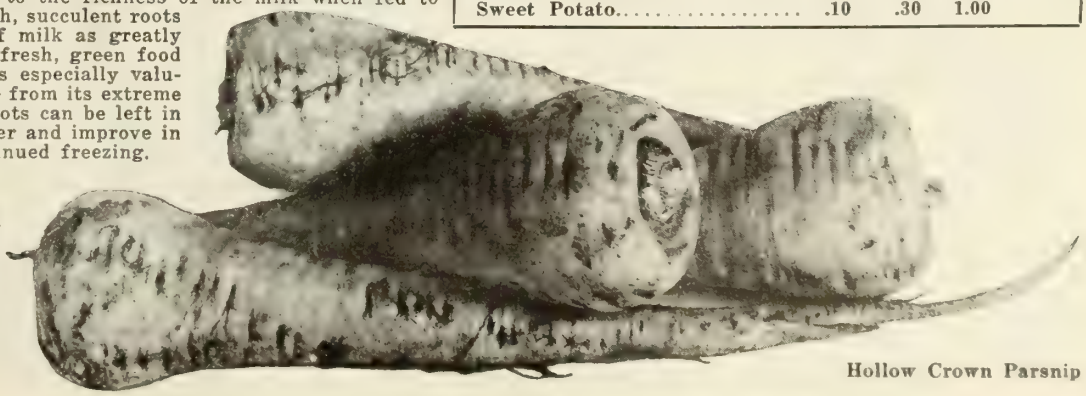
PARSNIPS

1 ounce to 150 feet of drill.

Parsnips are well known as a delicious table vegetable, but their value for the purpose of feeding cattle and stock is but little appreciated. The parsnip is rich in saccharine food, which adds greatly to the richness of the milk when fed to cows, while the fresh, succulent roots increase the flow of milk as greatly as does the use of fresh, green food in the spring. It is especially valuable for the purpose from its extreme hardiness, as the roots can be left in the ground all winter and improve in quality by the continued freezing.

All American

The outstanding parsnip in the All American trials. A Mid-West market garden strain.



Hollow Crown Parsnip

PARSLEY

1 ounce to 150 feet of drill.

Sow in rows 1 foot apart and 1 inch apart in the row. The seed is slow to germinate, and should be given the most favorable conditions. A deep, rich, loamy soil is required. For winter use a few plants placed in a box in the cellar will give a supply.

Champion Extra Dark Moss Curled The large leaves are very heavily crimped and curled. Very productive and most attractive, both on account of its dark green coloring and fine mossy appearance.

Turnip-Rooted, or Hamburg The large fleshy root, which resembles the root of a Parsnip, and is highly esteemed for flavoring soups, stews, etc.

Variety	Pkt.	¼ Lb.	Lb.	10 Lb.
	PRICES			
PARSLEY				
Champion Extra Dark Moss Curled	$ .10	$ .25	$ .75	$6.50
Green Castle	.10	.30	1.00	
Turnip-Rooted, or Hamburg	.10	.25	.75	
PARSNIPS				
Hollow Crown, or Large Sugar	.10	.25	.75	
All American	.10	.30	1.00	
PUMPKINS				
Connecticut Field	.10	.25	.75	5.50
Cushaw, or Crookneck	.10	.30	1.00	
Japanese Pie	.10	.25	.90	
King of Mammoths	.10	.30	1.00	
Quaker Pie	.10	.30	.90	
Sugar Pie Pumpkins	.10	.30	.90	
Sweet Potato	.10	.30	1.00	

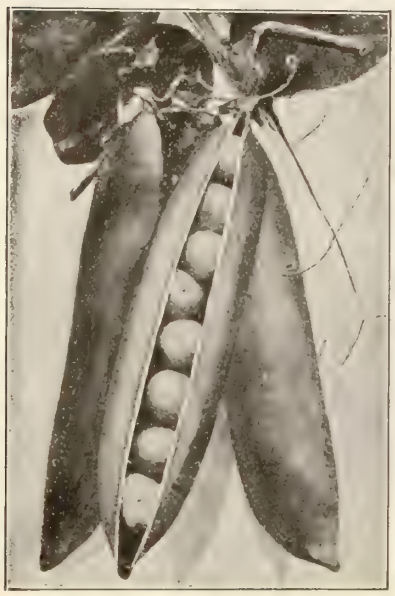
PEAS

1 quart to 100 feet of drill; 1½ bushels per acre.

Peas grow best on a light, rich, mellow soil under cool and moist weather conditions. Fresh manure and very rich or wet mucky soil should be avoided.

The extra early varieties are very hardy and should be planted as soon as the ground can be made ready, while the larger wrinkled varieties, which are not as hardy but of superior quality, may be planted when the soil has become slightly warmed, as the seed will rot if planted too early.

For private use, sow the seed in double rows, 18 inches apart and 3 inches apart in the row; for market, in single rows 2 to 3 feet apart and 1 inch apart in the rows. The peas will give quicker returns if covered only one inch deep, and where earliness is most important they may be treated this way. Larger pods and greater quantity will be produced if the seed is planted in trenches three to six inches deep and covered with only one to two inches of soil. When the plants are five or six inches high, fill the trench level with the surface. This will result in deep rooting, prevent mildew and prolong the bearing season. If the peas are covered to the full depth at first, or if water is allowed to stand in the trenches the seed will not germinate or grow well. The crop should be gathered as fast as it becomes fit for use, as even a few ripe pods left on the vines tend to retard the development of the young pods and prevent the formation of new ones.



Long Pod Alaska

FIRST EARLY SMOOTH VARIETIES

Extra Early Alaska Vine strong and vigorous, 2 to 2½ feet high, of a peculiar light green color, pods 3 to 3½ inches long, straight and blunt at the end. Is ready for picking 49 to 50 days from planting. Seed round, blue, slightly pitted. Matures crop very evenly.

Early Bird The most used and best extra early, large podded Dwarf now on the market. Very desirable for market gardeners and truckers. Seed is practically smooth, dark green in color, can be planted as early as the Alaska. Produces a strong, vigorous vine, dwarfed in length. Pods produced in profusion and are long, large, pointed and well filled with good sized peas. Is an excellent cropper and has replaced practically all other extra early varieties.

Bountiful Resembling the Alaska in general habit of growth. Vine 36 inches, foliage gray-green. Pods 3½ inches in length, pointed, gray-green in color. Fit for table use 55 to 57 days from planting; a prolific bearer, making it a valuable variety. Seed blue, medium pitted.

Mammoth Podded Extra Early An exceptionally early, large podded variety. Matures practically with Alaska and much more productive. Height 3 feet, pods 4 inches long, very dark, broad and round.

Long-Podded Alaska A favorite with truckers and shippers to Northern markets, producing a very early crop of large, broad, well-filled, dark green pods. Equally as hardy as Extra Early Alaska and much larger. The vines usually grow three feet high and the crop will remain fresh a long time after picking.

Improved Pilot A very early smooth pea with large pods. Very productive, can be planted early, vines three feet.

FIRST EARLY WRINKLED VARIETIES

Early Surprise An extra early variety of excellent quality, growing only 15 inches high but producing an abundance of dark green pods 4 to 5 inches long, very broad and well filled. The earliness, quality and the wonderfully prolific characteristics of this variety make it a very profitable sort for market gardeners.

Early Wonder Extremely early, of high quality and very productive. Pods are very dark and can be safely shipped long distances. Will soon become very important as a market gardeners variety.

Blue Bantam An improved strain of the Laxtonian type. Very early and produces pods a little darker than the Laxtonian. Vines are 16 to 18 inches high.

EDIBLE PODDED PEAS

Mammoth Melting Sugar This is by far the largest and finest of the true sugar or edible podded Peas.

PRICES

Variety	Qt.	Pk.	Bu.
Alaska—Wilt-resistant	$ .35	$2.00	$7.50
Blue Bantam	.45	2.50	9.00
Bountiful	.35	2.00	7.00
Early Bird	.35	2.00	7.50
Early Surprise	.45	2.75	10.00
Early Wonder	.45	2.75	9.50
Extra Early Alaska	.35	2.00	7.00
Improved Pilot	.45	2.75	10.00
Long Podded Alaska	.35	2.00	7.00
Mammoth Melting Sugar	.60	4.00	...
Mammoth Podded Extra Early	.35	2.00	7.50
Pedigree Extra Early	.35	2.00	6.50
Prolific Early Market	.35	2.00	6.50
Black Eyed Peas	.20	1.25	4.00

Left - Disease Stricken Right - Resistant to Wilt-Disease

Anne Arundel County field of two popular varieties. It has been found in many sections of Maryland, Wisconsin, etc., that peas are often badly damaged by Wilt, near Wilt, root-rot and other diseases. Some of these diseases are controlled by proper rotation of crops but Wilt can **only** be avoided on Wilt sick soils by using Wilt-Resistant strains.

The University of Maryland has been working on this problem in the canners varieties, accomplishing wonderful results. If you have not found it possible to grow a successful pea crop in recent years, try Wilt Resistant strains. It will mean success instead of failure if your soil is infected with Wilt.

INOCULATE ALL LEGUMES WITH NITRAGIN The Original Legume Inoculator

Peas, being legumes, are greatly benefited by inoculation with **Nitragin**, the legume bacteria fixing material. **Nitragin** increases yield and quality and also improves the soil. 9 oz. can treats 1 bu. seed, **50c**; 5 bu. size **$1.40**. (Specify "C.")

PEAS —Continued

WRINKLED VARIETIES

Laxtonian This is one of the finest dwarf early peas. The vines grow 18 to 20 inches high and produce an enormous crop of dark green pods as large as Gradus, maturing a few days ahead of this variety.

Alderman One of the best long vined, main crop varieties. Hardy, prolific, producing vines 3½ to 4 feet in length. Pods large, pointed, dark green in color. Maturing about the same time as the Admiral Dewey.

Gradus or Prosperity One of the best second early, long-strawed, wrinkled varieties. Produces long pointed pods, well filled and of fine table quality. Vines from 2½ to 3 feet in length. Considered one of the most desirable for the market garden or home use.

Little Marvel Larger podded than Nott's Excelsior. Pods blunt ended, well filled with fine quality peas, a splendid cropper.

American Wonder One of the old Dwarf varieties. A good cropper, produces small sized pods, well filled with finest flavored peas.

Premium Gem A second early, longer vine than the American Wonder. Pods similar.

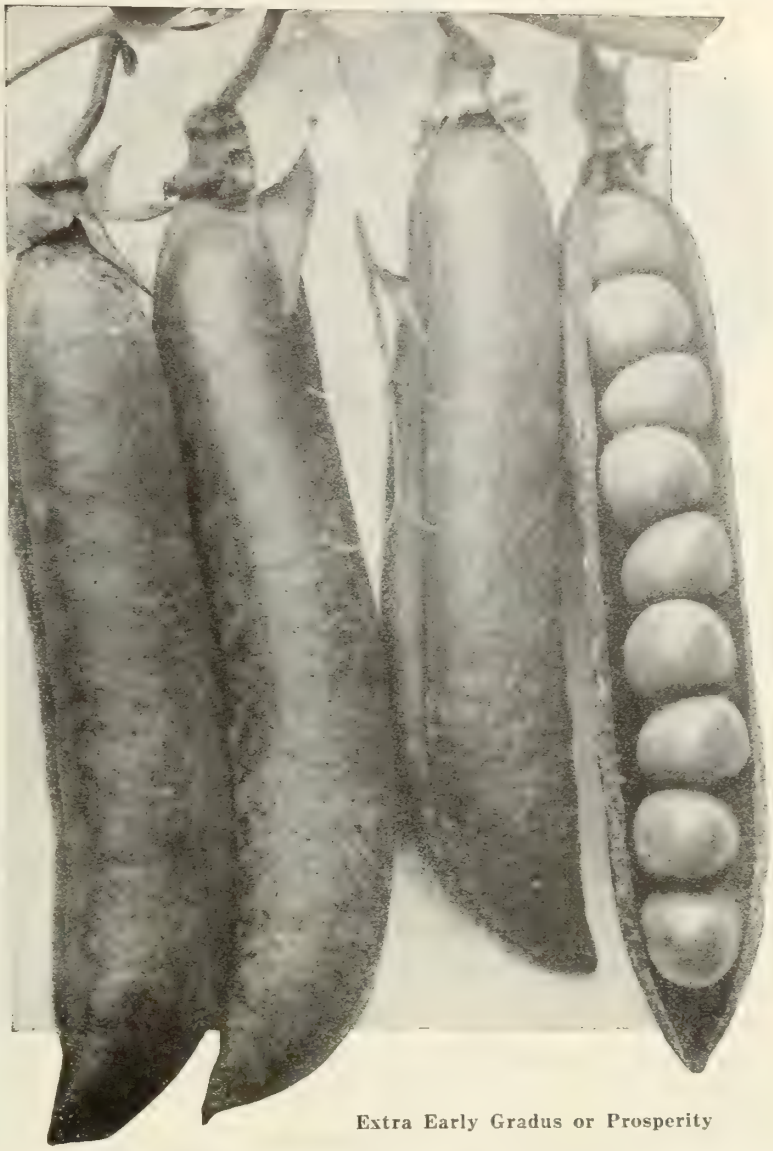
Nott's Excelsior More prolific grower than American Wonder. Pods about the same both as to size and quality. Perhaps a better yielder.

Potlatch Strong, vigorous vines of even growth, 20 to 24 inches in height, with luxuriant dark foliage, bearing pods medium green in color, 3½ to 4 inches in length. Broad and pointed at the ends. No variety known will produce more pods, and no pods could possibly shell out better. The Potlatch is a variety from which everyone may expect great things. Fit for table use 61 days from planting. Seed green, wrinkled, large in size.

Thomas Laxton This variety is of the same growth as that of the Gradus, but is usually three to four days later for market. The pods are square at the ends instead of having a long, sloping point, and considered by some to be of a better flavor than the Gradus.

Dwarf Defiance The best late or main crop Pea. Produces a medium length vine and an abundance of large, long pointed pods of a rich dark green color. Well filled with large luscious peas. For main crop or late variety in the home garden, it cannot be excelled.

Daisy, or Dwarf Telephone A second early, of robust but remarkably even growth. From 16 to 18 inches high. The stout plants are fairly loaded with large, bright green pods. Each pod contains from 7 to 9 large peas of a light bright green color, tender and well flavored.



Extra Early Gradus or Prosperity

Dark Green Telephone A tall-growing, late sort. 3½ to 4 feet in height, having beautiful dark green pods of very large size, containing 6 to 7 large peas of delicious flavor. Continues in bearing for quite a long time.

Ideal (Wilt Resistant) About a week earlier than Dark Green Telephone, yielding a large crop of very dark, pointed pods 5 inches long. Vine about 2 feet tall and 100 per cent resistant to Wilt.

PRICES	Qt.	Pk.	Bu.
Alderman—Wilt resistant	$ .45	$2.50	$8.50
American Wonder	.45	2.50	9.00
Dark Green Telephone—Wilt resistant	.45	2.50	8.50
Dwarf Defiance	.45	2.75	10.00
Dwarf Telephone—Wilt resistant	.45	2.50	8.50
Gradus or Prosperity	.45	2.50	9.00
Gradus—Wilt resistant	.45	2.50	9.50
Ideal Wilt resistant	.45	2.50	9.00
Laxtonian	.45	2.50	9.00
Little Marvel	.45	2.75	10.00
Nott's Excelsior	.45	2.50	9.00
Potlatch	.45	2.50	9.00
Potlatch—Wilt resistant	.45	2.50	9.50
Premium Gem	.50	3.00	10.00
Thomas Laxton	.45	2.50	8.50

Royal King Pepper

PEPPERS

1 oz. to 1,500 plants.

Peppers should be sown either indoors or in hotbeds early in April and transplanted to the permanent beds when about 3 inches high in two foot drills and two feet apart in the drills. The seed can also be sown in open ground when danger from frost is past but the crop will naturally be much later. A top dressing of fertilizer or poultry manure well mixed with the soil when the plants are about 6 inches high will materially aid in the production of a big crop.

Royal King Plants grow about 2½ feet high, and are vigorous; compact and very productive, commencing to bear very early and continuing until killed by frost. The fruit is very large, bright and glossy and the extremely thick flesh is sweet and mild. They will stand distant shipping and hold up well for market as they do not wilt nor become ripe near so quickly as other large varieties. This strain is extensively grown in the South by large shippers and deserves the attention of every trucker and home gardener.

Early Giant The earliest medium large pepper in cultivation; being earlier than Neapolitian. The plants are very uniform in growth, dwarf and compact, seldom over 18 inches in height, and very productive. Fruits pendant, mild and sweet, similar to Bull Nose in form.

Ruby Giant A variety of Mango Pepper which is of a desirable size and shape for stuffing. A cross of Ruby King and Chinese Giant. Grows to large size and is very mild.

California Wonder Its large, smooth, extremely heavy, very mild, thick flesh, make this variety truly a wonder. Combining the excellent quality of the Pimento and the size of Crimson Giant, California Wonder is being grown for all purposes. Plants are sturdy, productive and slightly spreading, bearing five to nine large glossy fruits to a setting, averaging one-half pound each. Deserves the attention of every pepper grower.

Pimento or Perfection A medium early, prolific, perfectly mild variety with extremely thick flesh. On account of its thick flesh it will hold up for a long time, and is an excellent sort for canning whole.

Chili, Small Red conical pod, about 2 inches long, very hot. Fine for pepper sauce and seasoning.

Cherry Red Fruit small, round, color rich scarlet, very hot.

Ruby King Good variety for mangoes or pickling; very productive and sweet.

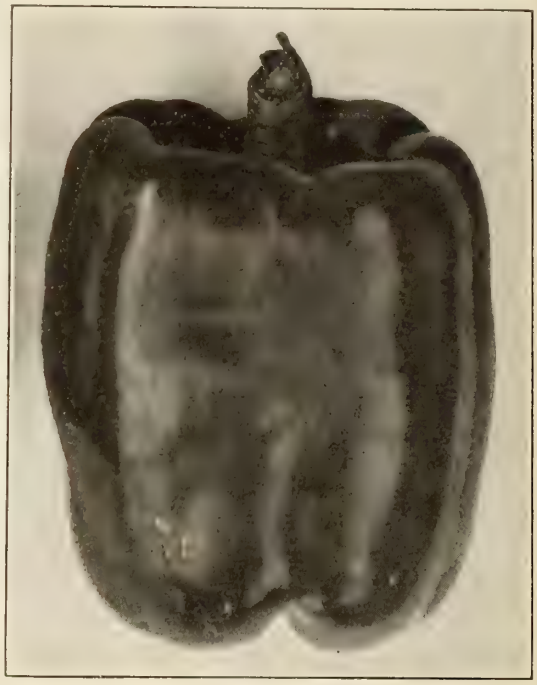
Chinese Giant This desirable variety is one of the largest sweet peppers ever offered. The flesh is quite thick, very mild and remarkably sweet.

Large Bell, or Bull Nose This large, early and productive sort has the most pungent flavor of all the large peppers. Thick flesh.

Neapolitan A variety of Sweet Pepper which matures very early. It grows about 3 inches long, and is remarkably sweet.

Long Red Cayenne The pods are long and slender; bright red color and very pungent. This is an old-time favorite and is used extensively for bunching with pot-herbs.

World Beater or Sweet Mountain This splendid pepper is a cross between Chinese Giant and Ruby King, and combines the size of one and the earliness of the other. It is exceedingly mild, very large and the color good. The flesh is very thick, making distant shipment possible.



California Wonder

Chinese Giant Pepper

Pepper Plants

In All The Leading Varieties. FRESH DAILY See Page 36.

PRICES	Pkt.	Oz.	¼ Lb.	Lb.
California Wonder	$ .10	$ .40	$1.25	$4.00
Cherry Red	.10	.40	1.00	3.50
Chili, Small	.10	.40	1.00	3.75
Chinese Giant	.10	.40	1.35	5.00
Early Giant	.25	.40	1.00	3.50
Half Long Narrow Cayenne	.10	.40	1.10	4.00
Large Bell, or Bull Nose	.10	.25	.75	2.75
Long Red Cayenne	.10	.35	1.00	3.50
Mammoth Golden Queen	.10	.35	1.00	3.75
Neapolitan	.10	.35	1.00	3.50
Pimento or Perfection	.10	.30	.85	2.00
Royal King	.10	.35	1.00	3.50
Ruby Giant	.10	.40	1.35	5.00
Ruby King	.10	.25	.75	2.75
Topepo	.10	.50	...	...
World Beater or Sweet Mountain	.10	.35	1.00	3.75

MAINE GROWN

SEED POTATOES

LET US QUOTE PRICES ON HIGHEST QUALITY SEED ON BASIS OF LOWEST MARKET VALUE

Potatoes will adapt themselves to various soil conditions as easily as most vegetables. A better crop will be produced, however, on a sandy loam which contains a quantity of well rotted vegetable matter. A clover sod, vetches turned under in the fall, or land which was heavily manured for a previous crop supply ideal conditions.

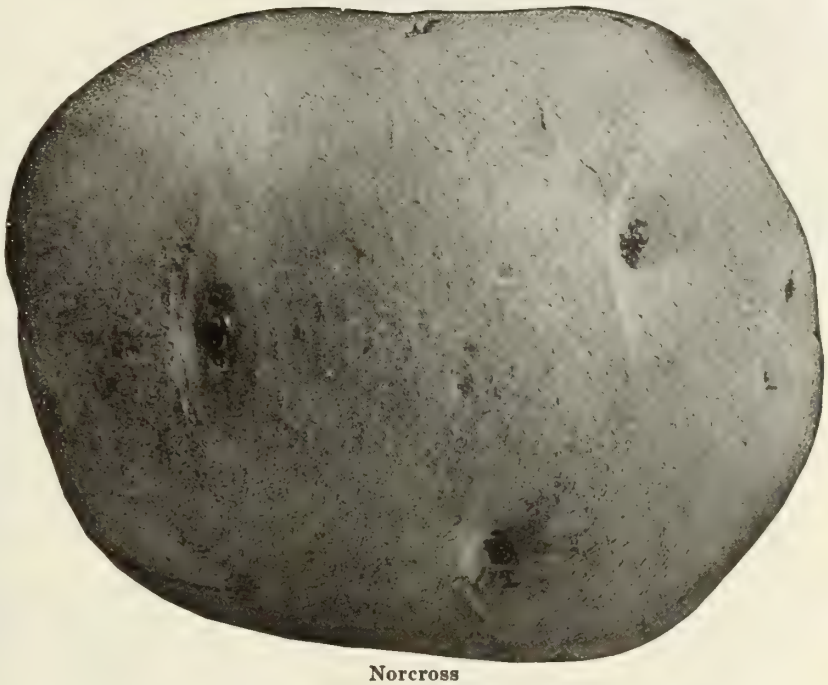
In preparing the seed the eyes should be cut so that the largest part of the surrounding flesh is situated toward the stem end, because the eyes of a potato always have a root system running toward that end and for that reason the sprouts cannot draw moisture from the opposite direction. If the ground you intend to use has produced a scabby crop previously or the seed shows any trace of disease, the pieces should be disinfected as a preventative.

For a very early crop, run off furrows about three feet apart and about four inches deep. Drop the pieces about 15 inches apart in the furrows and cover to a depth of about 1½ inches, gradually filling in the furrows to level as the vines grow larger. For main crop it is just as well to cover the eyes with four inches of soil at once. If fertilizer is used, apply it either in the row or broadcast before planting and be sure that it is thoroughly mixed with the soil so that the seed is not burned. Fresh stable manure will cause the potatoes to become scabby.

Just before the sprouts have appeared above the ground run a light harrow over them to kill the weeds and break up the crust. Continue weeding and harrowing until there is danger of breaking off too many sprouts. Cultivate thoroughly and frequently, being careful not to cut any of the roots, continuing until the vines have attained full growth and begin to spread.

Spraying for insects and blight is very necessary, Pyrox giving very satisfactory results.

The size and quality of the crop and the ability to resist disease is directly dependent upon the seed planted and no amount of cultivation or attention will offset the uncontrollable results of poor seed. Be sure of your crop and plant only the best Maine grown seed potatoes.



Norcross

Red Bliss, or Bliss Triumph This variety is rapidly growing in favor. The tubers are round and uniform in shape, eyes slightly depressed and of a beautiful bright red color, very hardy and vigorous, maturing with extra earlies.

Maine Certified Cobblers Planted, grown and shipped under the extremely rigid requirements of the Canadian Government, assuring finest quality clean seed, free from disease, uniform in size, true to type and from highly productive strains.

Irish Cobbler The biggest Potato and greatest producer known among the first early varieties. It will outyield all other early kinds and equal most of the later varieties. Fine quality, color a pure, creamy white, shape round to oblong and smooth. Vines very stocky, with dark foliage.

Early Rose For a generation the standard Potato of the whole country for earliness, yield, thrift, beauty and table qualities, because it always succeeds well in any soil. Our stock is strictly pure.

Green Mountain White skin, flat, oval form, smooth, of good appearance; excellent table quality. Ripens slowly, and is a good keeper. Valuable for late crops. Now taking the lead in all markets.

Gold Coin A very desirable main crop variety proven to be very hardy, of vigorous growth, most productive, of the very best quality. The tubers are slightly oblong, rather broad and quite thick through. The eyes are small, and there is but little waste in paring. The skin is thin, smooth and glossy, of a light golden tint.

White Star Medium late, of good size and quality, white in color; eyes flush with the skin and a good keeper.

Norcross Its shape is a little oblong and slightly flattened, the skin is finely netted or rusty, which always indicates good cooking and eating qualities. The tuber. are large and very uniform, maturing medium early.

Dakota Red This very popular local variety has gained favor due to its very productive and fine cooking qualities. It often brings a higher price in Baltimore markets than the most fancy table stock from New York and Maine. Used for late crop only. Let us quote.

Michigan Russet Rapidly gaining popularity in Maryland due to excellent quality and exceptionally high yield. We offer specially selected seed.

SEED SWEET POTATOES

Elzey's Improved The strain used every year by Maryland's most successful sweet potato growers. Yields 25 to 50 per cent more marketable stock and sells higher than any other. Dry and sweet; decidedly the best of all. **Prices subject to market fluctuations. Let us quote.**

Sweet Potato Plants See Page 36.

Semesan Bel

This instantaneous dip treatment for both white and sweet potatoes is fast replacing all formerly practised methods of seed potato disinfection. Semesan Bel exerts an invigorating effect upon plant growth by removing disease handicaps and repelling the attacks of soil-borne organisms so that yields are greatly increased. Ask for Semesan Bel booklet. 1 lb. treats 16 to 22 bushel. **Prices—1 lb. $1.75; 5 lbs. $8.00.**

RADISHES

1 oz. for 100 feet of drill; 9 lbs. per acre.

Light, sandy soil, rich in organic matter is essential to produce crisp and tender radishes. For an early crop sow the seed as soon as the ground can be worked, in drills 6 to 10 inches apart, covering the seed half an inch deep. When the plants are well started, thin out to one inch apart in the drills. Frequent watering in dry weather is very beneficial as high quality is largely dependent upon rapid growth. For a continuous supply, successive plantings should be made at intervals of 10 days to two weeks, selecting varieties best suited for the season.

Extra Early Scarlet Globe Outdoor Forcing

Extra Early Scarlet Globe (Outdoor Forcing)

From Specially Selected Transplanted Roots

This is the market gardener's favorite as a forcing Radish, very early; mild and crisp, juicy and tender; top small, will stand heat without becoming pithy. One of the best selling and most attractive Radishes on account of its bright scarlet color and handsome shape. Our stock of this is the very best, selected with special care as to size, shape, color and earliness, and market gardeners will find it a money maker, as it is just right in every respect. **Pkt., 10c; ¼ lb., 20c; lb., 60c; 10 lbs., $5.50; 100 lbs., $50.00.**

Greenhouse Forcing Scarlet Globe This strain has been especially bred to meet the very exacting requirements of greenhouse cultivation, producing quickly a highly marketable crop of uniformly shaped radishes of fine quality.

Glowing Ball (New) Brilliant cerise red, true globe shape; most outstanding novelty of the 1933 All American trials.

Early Deep Scarlet Turnip For outdoor sowing this is the most important in the Baltimore market, thousands of pounds being annually used. Our stock is the very best. It has a rich scarlet color, ball shape, a little larger top and matures a week later than the forcing varieties.

Ruby-Pearl The color is a bright scarlet and white. It is extremely quick to mature, being ready for the table in 20 days from the time of sowing the seed. It is invaluable for forcing under glass as well as for growth in the open air. The skin is very smooth, and its clear color gives it an appetizing appearance on the table. Its flavor is excellent, and its qualities high in all respects.

Early Scarlet Turnip, White Tipped One of the handsomest of the Turnip Radishes for early planting outdoors. Roots slightly flattened on the under side, color very deep scarlet with a white tip; flesh white and of the best quality.

Crimson Giant A variety combining earliness and great size. It grows much larger than other extra early varieties, but does not become pithy even when fully twice as large in diameter and a week older; beautiful crimson-carmine; turnip-shaped; flesh firm, crisp and tender. We recommend it for outdoor garden planting as well as for greenhouse forcing.

Round Scarlet China This variety of China Radish may be sown at intervals from spring until autumn. Matures in from six to seven weeks, and is much hardier than most other varieties. Valuable as a winter Radish, as well as for summer. Its handsome round shape, rich scarlet color and pure white flesh commend it to all.

Golden Globe Second early, grows to a good size; stands the heat well; very popular with market gardeners; a beautiful golden yellow, flesh crisp and tender.

PRICES

	Pkt.	¼ Lb.	Lb.	10 Lb.
Glowing Ball (new)	.10	.30	1.00	9.00
Scarlet Globe Forcing	$ .10	$ .20	$ .60	$5.50
White Icicle	.10	.20	.60	5.50
White Strasburg	.10	.20	.60	5.50
ALL OTHER VARIETIES	.10	.25	.75	7.00

Early Scarlet Turnip, White Tipped

RADISHES (Continued)

French Breakfast Color is a scarlet rose, shading to a waxy white at the tip; quick growth, mild and tender, good for forcing.

Feton's Model White Box (Forcing) It is of most handsome shape, very early and has but few leaves, thus making it of special value for growing in hotbeds or "boxes," and one-third more radishes can be grown in the same space than with most other sorts. It is of clear white color, solid, juicy and unsurpassed in flavor.

Long Scarlet This is the standard extra early long scarlet market variety, short top, long scarlet roots; crisp, fine flavor.

White Icicle Radish It fully equals in crisp, tender flesh and mild flavor the popular White Vienna or Lady Finger, while it is as early as Long Scarlet Short Top. Planted in spring the young Radishes are ready for use in 20 to 25 days from sowing the seed, and their long, slender form and pure paper-white skin are most attractive when bunched for market.

Cincinnati Market ("Glass Radish") A selected strain of the Long Scarlet, growing to slightly larger size fully as early and darker in coloring.

Improved Chartier The color at top is crimson, running into pink at middle, and from thence downward is pure waxy white. It is of a very quick growth, and ready for use nearly as early as Long Scarlet. Exceedingly tender and crisp.

Pearl Forcing This variety is a cross between Wood's Early Frame and White Strasburg. The color is a pearl white with a fine waxy appearance, very firm and solid. They will remain in good condition longer than any other extra early variety.

White Icicle

White Strasburg

Long White Vienna, or Lady Finger This is the finest Long White Radish in cultivation; it is most beautiful in shape, white in color, both skin and flesh are pure snow-white, crisp, brittle, and of rapid growth. Highly recommended.

New White Strasburg A very new desirable summer variety, a favorite with our market gardeners. Skin and flesh both white. It is excellent quality and a quick grower.

Perpetual White Summer This variety introduced by us, has given splendid satisfaction to all who have tried it. They are pure white, of uniform good quality, crisp and brittle, and they keep longer in a fit condition for the table than any variety we know of, hence their name. Perpetual White Summer can be sown any time of the year, and will always produce good radishes fit for market earlier than the Chartier, and keeps in perfect shape for marketing about four weeks, or longer for home use.

White Stuttgart Quick growing and therefore very early. Of the largest size, and both flesh and skin are pure white; quality fine, firm, and brittle. Can be pulled for use at any stage.

Large White Summer Round, smooth, very white, crisp, and tender. The market gardener's favorite for summer use.

WINTER VARIETIES

White Chinese New Celestial

Large, stump-rooted Radish with white skin and flesh. Can be sown from July 1 to August 15, and will keep in prime condition, mild in flavor, brittle, and never woody. Market gardners will find this a special seller.

Long Scarlet

White Round Spanish Root large, often five inches in diameter, turnip-shaped, skin pure white, flesh white crisp and not becoming pithy, very compact and highly flavored; an excellent sort for winter, as the roots keep a long time.

Improved Half-Long, Black Spanish Radish This new sort is intermediate in shape between the Old Round and Long Black Spanish, and much superior to either. Flesh mild, very sweet and crisp, never pithy, and is decidedly the best of all black radishes. If stored in damp sand in the cellar, they will keep all winter.

Round Black Spanish Like the Long White Spanish, except in shape.

Chinese Rose A splendid rose-red variety that keeps during winter; tempting flavor and very crisp.

Long White Spanish This variety is of a snow-white color, similar to the White Strasburg in shape, but rather more stump-rooted.

Long Black Spanish Black skin, white flesh, very firm and solid, good keeper, grows long and large.

California Mammoth Was first introduced into this country by the Chinese in California. It is pure white, about one foot long, and two or three inches through, tapering regularly to the tip. The flesh is tender and crisp, keeping well through the winter.

Part of 150 bags shipped from Holland early in August via Hamburg, Germany. This routing gives our customers special service in supplying new crop seed quickly.

SPINACH

1 oz. to 100 ft. of drill; 12 to 15 lbs. per acre.

OUR IMPROVED STRAINS ARE GROWN BY THE ORIGINATORS AND WHEN BETTER QUALITY IS PRODUCED WE ARE ALWAYS AMONG THE FIRST TO OFFER IT.

One of the most staple vegetables of the American table, possessing highly valuable and health giving qualities; easily grown, requiring but little attention and in sections where the soil is rich, very profitable crops are produced.

Select a rich piece of ground, the richer the better; and for late spring and early summer use, sow the seed during February, March and April in drills one foot to 20 inches apart, one-half to one inch deep. When the plants are well started thin out to 4 to 6 inches apart, or sow the seed thinly and allow all the plants to stand.

For winter and early spring use, sow either in drills or broadcast during August, September and October. A top dressing of Nitrate of Soda will make a vast improvement in the earliness, size and quality of the crop.

Old Dominion A later seeding type of Virginia Yellows Resistant Savoy which stands 12 to 15 days longer, having about the same season of growth as our Extra Dark Green Savoy. With old Dominion it is now possible to successfully grow an early spring crop on diseased soil, where it was previously necessary to take chances with the early seeding character of Virginia Blight Resistant.

Manns' Extra Dark Green Savoy As with other important introductions of new strains having real merit, we are among the first in America to offer this improved type of Bloomsdale Savoy. It is only about two days later than Reselected, but the plants are larger, less liable to bolt to seed, more heavily crumpled and of more upright growth. The very dark green color, however, is its chief advantage and in making the selections for this deep color the plant breeder has also improved the strain in its savoyed characteristics and absolute freedom from smooth leaved plants. Some of the most successful spinach growers in this section have already reported this new strain a very profitable crop.

Manns' Reselected Bloomsdale Savoy

This strain has been developed in response to the urgent demand on the part of large spinach growers for an improvement in the quality of the regular commercial Bloomsdale grown in Holland.

The plants are large, heavy, uniform and in every way especially re-selected to match the ideal Bloomsdale Savoy type.

Virginia Blight Resistant Bloomsdale

A strain of Bloomsdale Savoy especially developed by the Virginia Experimental Station for the purpose of resisting the disease commonly called yellows. Used extensively in the vicinity of Norfolk and in other sections where blight is encountered.

Being an American sort, it matures very quickly and is therefore preferred by some growers for early Fall sowing. Our seed is grown from thoroughly reliable, genuine Virginia Blight Resistant stock.

PRICES	Lb.	10 Lbs.	25 Lbs.	100 Lbs.
Early Long Standing Savoy	$ .30	$2.00	$4.75	$17.50
Extra Dark Green Savoy	.25	1.85	4.25	16.00
Giant Smooth Leaved	.25	1.90	4.25	15.00
Juliana	.30	2.00	4.75	17.50
Long Season	.30	2.25	5.25	20.00
Old Dominion Blight Resistant	.25	2.25	5.25	20.00
Reselected Bloomsdale Savoy	.25	1.75	4.00	15.00
Virginia Blight Resistant	.25	1.85	4.25	16.00
Ton lots, deduct $1.00 per 100 lbs.				
	Pkt.	**Oz.**	**¼ Lb.**	**Lb.**
New Zealand	$ .10	$ .15	$ .25	$ .75
Southland Summer	.10	.15	.25	.75

First 1933 New Crop Holland Spinach Seed to arrive in Maryland.

Field of Manns' Old Dominion, October 12, 1933, grown by Mr. Clarence Shallcross, near Philadelphia.

Holland Field of Early Long Standing Savoy for Seed

Manns' Early Long Standing Savoy Nearly as early as reselected savoy but has the very valuable advantage of standing in perfect condition, without bolting to seed, 10 to 14 days longer than other varieties. This feature is worth thousands of dollars to spinach growers, for with this variety it is possible to market the crop when it is convenient and advantageous for the grower to do so. Many severe losses have been incurred because cutters were not available, weather conditions unfavorable, or prices were too low, but Early Long Standing will wait for cutters, for weather, and for prices.

Long Season Very successfully grown for supplying local markets during warm weather when other varieties have gone to seed. The beautiful large plants are in prime condition in about 50 days and remain marketable for 15 to 20 days. Somewhat earlier than Juliana and producing extremely dark glossy green leaves, thoroughly savoyed, thick and firm in texture.

Princess Juliana Greatly resembling savoy as the picture opposite will show; much slower in growth, however, and very late in going to seed. The ideal variety for late spring sowing, as it thrives well in warm weather and is in great demand as long as the weather permits shipping.

Giant Smooth Leaved The most popular variety in Holland for home use and largely used by Western packers of fancy canned goods because of its excellent quality and very dark green color. The flat, extremely heavy leaves do not ship well but are ideal for the grower who contracts by weight.

Southland Summer New special strain of Swiss Chard more closely resembling real spinach, producing large heavily crumpled leaves of a bright green color. Will eventually replace New Zealand.

New Zealand **(TETRAGONIA EXPANSA)** Not related to regular spinaches but forming larger spreading plants producing fleshy brittle tips and leaves which are used as spinach. Of delightful flavor and practically everbearing.

Princess Juliana Grown by KRASTEL BROS.

Mammoth Sandwich Island Salsify

SALSIFY

OR OYSTER PLANT

1 oz. for 50 feet of drill.

Requires a well enriched, mellow soil, which, previous to sowing the seeds, should be stirred to a depth of 18 inches. Sow early in the spring in drills 15 inches apart; cover the seed with fine soil 1½ inches in depth, and when the plants are strong enough thin out to 6 inches apart. As the leaves resemble grass, be careful they are not mistaken for it when weeding.

Mammoth Sandwich Island A new and improved type, producing roots of nearly double the size and weight of the old varieties; mild and delicately flavored.

RHUBARB or Pie Plant

Sow in April or May, in drills 1 foot apart; when 3 or 4 inches high, thin out in rows 6 to 10 inches apart. Transplant the ensuing fall or spring in rich soil. Set out the roots 3 to 4 feet apart each way; the following spring it will be fit to use.

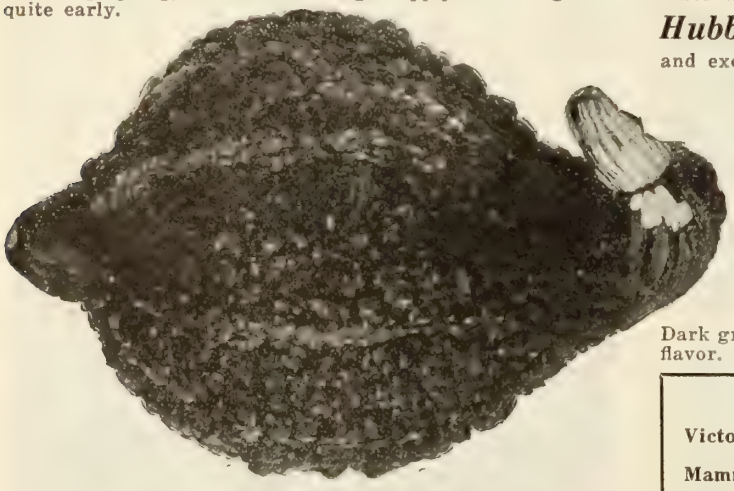
Victoria Very large, the finest cooking variety.

RHUBARB ROOTS—See Page 36.

SORREL

BROAD AND NARROW LEAVED

A hardy plant grown for its leaves, which are used as boiling "greens" or salad. Seed should be sown thinly in drills early in spring. When well started thin out to stand 4 to 6 inches apart in the row. The leaves can be gathered for use at any time after the plants are well started in growth, and the roots will continue to produce a further supply. The plant is entirely hardy, and, starting into growth early the following spring, will afford a large supply of fine "greens" quite early.



Improved Hubbard

HERBS

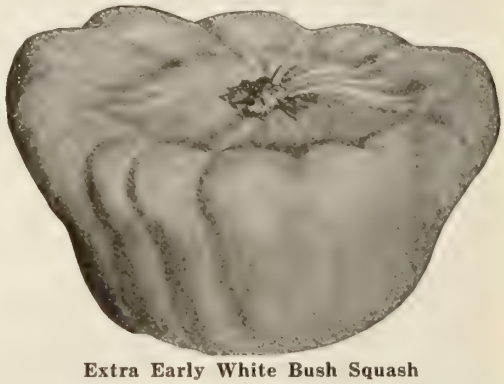
	Pkt.	Oz.	¼ Lb.
Anise	$ .10	$ .15	$ .40
Basil	.10	.15	.50
Caraway, lb., 25c		.10	.15
Coriander	.10	.15	.35
Dill, extra large, lb. 75c	.10	.15	.25
Fennel, lb. $2.50	.10	.25	.75
Lavender	.10	.25	.75
Marjoram, sweet	.10	.25	.75
Sage	.10	.40	1.25
Summer Savory	.10	.20	.50
Thyme	.10	.50	1.75

SQUASH

1 oz. of bush sorts to 40 hills; large seeded 15 hills.

2 lbs. of bush sorts to acre; large seeded 3 to 4 to acre.

Squashes, like other vines, are partial to a light, dry, rich soil. Plant the running varieties in hills 10 feet apart each way; thin out to three plants in a hill. Cultivate frequently until the vines commence running, after which do not work the soil deep. Use Paris Green to destroy bugs, as with Cucumbers. Plant Bush Squashes in hills 5 feet apart each way; thin out to four plants in a hill.



Extra Early White Bush Squash

Extra Early Jersey White Bush Scallop This is an improved strain of the Old White Bush. It sets fruit 10 days earlier, of a beautiful clear waxy white.

Green Tinted Preferred by many market gardeners by reason of true decided light green color, even when fully matured.

Golden Summer Crookneck A superior strain of summer crookneck, heavily warted, of a very deep orange color, 9 inches long, of excellent quality and highly productive.

Cocozza Large Green Italian Produces pale green fruit, 3 feet long and 3 to 4 inches in diameter; very straight if vines are trailed so that squashes are suspended.

Hubbard Well-known winter variety, with very hard firm shell, fine grain, sweet and rich flavor, and excellent for table use. A splendid keeper.

Delicious (Winter) Top shaped, 7 to 8 pound fruits with orange flesh of excellent quality. Requires 100 days. Good keeper.

Boston Marrow A fall and winter variety regarded very highly in the markets. Oval form, pointed, thin rind, fine grain; salmon-colored flesh, remarkably sweet and delicious. Keeps well in winter and will boil dry as a mealy potato.

Table Queen or Des Moines (Winter)

Dark green, acorn-shaped fruits; flesh yellow; sweet inviting flavor. Bakes well. Matures in 60 days.

PRICES

	Pkt.	¼ Lb.	Lb.
RHUBARB			
Victoria	$ .10	$ .40	$1.25
SALSIFY			
Mammoth Sandwich Island	.10	.50	1.75
SORREL			
Large-Leaved French	.10	.50	1.75
Narrow Leaved	.10	.65	2.25
SQUASH			
Boston Marrow (10 lbs. $6.00)	.10	.25	.75
Cocozza Large Green Italian	.10	.40	1.25
Extra Early Jersey White Bush Scallop	.10	.25	.75
Giant Summer Straightneck	.10	.50	1.50
Golden Hubbard	.10	.50	1.50
Golden Summer Crookneck	.10	.30	1.00
Delicious	.10	.40	1.25
Table Queen	.10	.40	1.25
Green Tinted	.10	.40	1.25
Green Hubbard	.10	.40	1.25
Winter Crookneck	.10	.25	.75

TOMATOES

1 oz. to 2,000 plants; ¼ lb. per acre.

All our tomato seeds are grown from stocks, exclusively for seed purposes, by the originators, experienced growers and experts. We are fully convinced of the merit of all new varieties before placing them in our catalog, and therefore strongly recommend our strains as being absolutely reliable.

For early, the seed should be sown in hotbeds during February or the first week in March, in drills 5 inches apart and half an inch deep. Later sowing may be made until the last of April. When the plants are 3 or 4 inches high they should be set out 4 or 5 inches apart in another hotbed or cold frame, or removed into small pots allowing a single plant to the pot. Expose to the air as much as possible to harden. Water freely at time of transplanting, and shelter from the sun a few days until the plants are established. Cultivate thoroughly as long as the vines will permit, but the last two or three workings should be very shallow or the crop may be badly injured, especially if the cultivator is run too near the plants.

Extra Early Varieties

Improved Advance An extra early, large tomato of high quality, round or slightly flattened shape, and exceptionally smooth for such an early variety. As early and hardy as Earliana and yielding more fruit both in the first and subsequent pickings. It is more shapely, more free from cracks and shows less green about the stem than other extra early sorts. With Improved Advance the grower can produce a crop which will stand superior in appearance and quality, in competition with the other extra earlies and command the fancy prices of an early market.

Break O'Day Dr. Fred J. Pritchard of the U. S. Dept. of Agriculture describes his new creation as follows: "Very productive, early variety, highly resistant to wilt and somewhat resistant to blights. Fruits large, smooth, meaty, red, globular."

It is a cross between Marglobe and Marvana combining the quality, appearance and yield of Marglobe with the early type vine growth of Marvana. Both parent stocks are disease resistant. Trials in Florida, and in the North indicate that Break O'Day will become the most important early tomato, as it is about ten days earlier than Marglobe, and while it is slightly smaller it is an excellent shipper as well as a good canners variety.

Dr. Pritchard's success in plant breeding and his recommendation of this variety should lead every market gardener to make at least a trial planting for comparison with present favorites.

Sparks' Earliana This is an extremely early variety and produces large clusters of fair-size fruits, which are very uniform in size and shape. It is hardy, and can be set out early. Color of flesh deep red, very solid and fine flavor.

Bonny Best Our special strain of Bonny Best has become a favorite among large growers for the early market. It is truly so superior to the ordinary stocks that it might rightfully be considered a new variety. It is earlier than Chalk's Early Jewel, and within two or three days as early as Earliana. Very prolific, with liberal foliage to protect the fruit from the sun. The beautiful scarlet-red fruit is set in clusters of 5 or more. Its great characteristic is that it ripens each setting of fruit nearly all at once, and ripens evenly all over up to the stem.

I want to say a word of praise for your special strain of Bonny Best Tomato. For heavy cropping, large size, and earliness and smoothness, it can not be beat. It will suit any critical market gardener if he wants the best strain obtainable. I have been growing Bonny Best Tomatoes for 20 years and have paid as much as $5.00 per ounce, but I must say that you have about the best strain I ever used. They are extra fine.

Geo. T. Robinson, ———, Md.

Chalk's Early Jewel Ripens 10 days later than sparks' Earliana, but more desirable for home use, as fruits are thicker through and more solid, comparing favorably with the later maturing sorts. Color bright scarlet and quality very best.

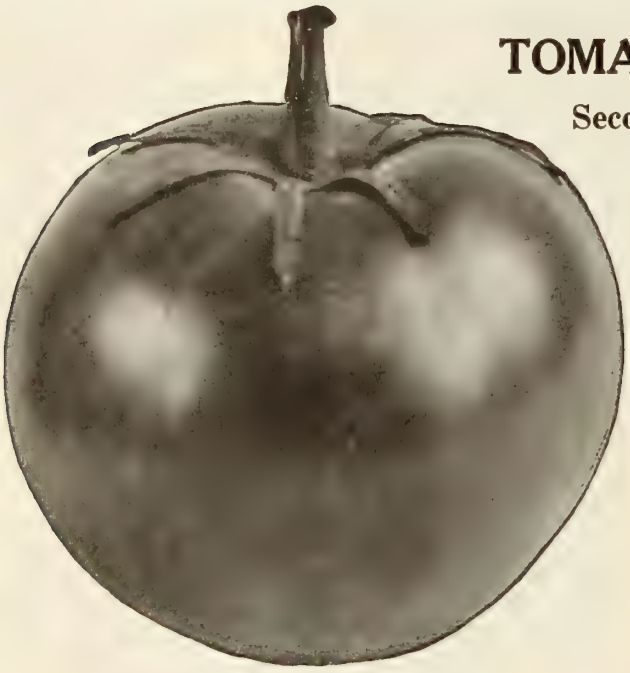
John Baer A second early variety, maturing 10 days later than the King of the Earlies. Fruit is borne in clusters of 3, of bright red color, averaging 3 inches across and 2¾ inches from stem to blossom end.

	PRICES			
	Pkt.	Oz.	¼ Lb.	Lb.
Bonny Best	$ .10	$ .25	$ .75	$2.50
Break O'Day	.10	.35	1.00	3.50
Chalk's Early Jewel	.10	.25	.75	2.50
Early Canadian	.25	.60	2.00	7.00
Early Detroit	.10	.50	1.50	5.00
Enormous	.10	.40	1.25	4.00
Greater Baltimore	.10	.25	.60	2.00
Improved Advance	.10	.50	1.50	5.00
IXL Extra Early	.10	.30	.90	3.00
John Baer	.10	.25	.75	2.50
King of the Earlies	.10	.30	.90	3.50
Kelley's Red	.10	.25	.75	2.50
Livingston's Beauty	.10	.30	.90	3.00
Livingston's Globe	.10	.35	1.00	3.50
Livingston's Paragon	.10	.25	.75	2.50
Marglobe	.10	.25	.75	2.50
Marglobe Special	.25	.45	1.35	5.00
Market Champion	.10	.50	1.75	6.00
Maryland Pride	.10	.25	.60	2.00
Matchless	.10	.25	.60	2.00
Ponderosa	.10	.50	1.50	5.00
Pritchard	.10	.35	1.00	3.50
Red Rock	.10	.25	.60	2.00
Scarlet Topper	.10	.35	1.00	3.50
Sparks' Earliana	.10	.25	.75	2.50
Stone (Improved)	.10	.25	.60	2.00
Success	.10	.30	.85	3.00
Wilt Resistant	.10	.25	.75	2.50
Wisdom Tomato	.10	.25	.60	2.00
Pear Shaped Red	.10	.30	1.00	...
Pear Shaped Yellow	.10	.30	1.00	...
Yellow Plum	.10	.30	1.00	...

Bonny Best Tomatoes

TOMATOES

Second Early and Main Crop Varieties



Marglobe Special

Marglobe Special Our stock of this extremely popular variety is far superior to the average and we have received many unsolicited testimonials complimenting us on its excellent quality.

It produces heavy yields of large smooth, globular, meaty, red fruits. They have a delightful flavor, and are covered with a thick skin which hinders cracking. Moreover, the plants shade the fruits well and thus protect them from sun-scald.

Scarlet Topper or Pritchard The last introduction of the late Dr. Pritchard and considered by many to be superior to his Marglobe. It is a self-topping disease-resistant sort, heavily productive, of good color and in appearance almost identical to Marglobe. Highly valuable for market garden use, for shipping and packing.

Market Champion A main crop variety possessing all the good qualities to make it ideal for home and market gardeners. Vines large, hardy and productive. Fruits bright scarlet, oval and deep, exceptionally smooth; one of the best of all tomatoes for canning, and a money-maker for the market gardener.

Maryland Pride Since our introduction of it in 1905 it has been grown with great success by canners and market gardeners, who pronounce it "the very best second early and main crop Tomato they have ever grown." The fruit is a beautiful bright red color, magnificent size and handsome, smooth shape. The vines grow vigorously and produce abundantly until killed by frost.

B. B. Tomato For description see New Stone.

Enormous So named on account of the large size of Tomatoes, which are very solid and smooth. Quality good.

Greater Baltimore Large, smooth, solid, bright scarlet; second early Tomato; a prolific bearer and fine shipper.

Ponderosa The largest purple fruited Tomato in cultivation; very solid and of finest quality.

Manns' Improved Stone This variety has attained great favor with canners and market gardeners everywhere. Its solidity and carrying qualities are remarkable. Its color is a desirable red; in shape perfectly smooth, and thicker from stem to blossom end than most varieties, making it most handsome and salable.

Wilt Resistant In developing this wilt-proof strain the plant breeder has made his selections from a strain of the very highest quality in points of production, size, flavor, weight, thickness of skin and color. A very profitable main crop sort.

Preserving Tomatoes The following small-fruited varieties are used for making preserves, and are also quite ornamental while growing in the garden:

Pear-Shaped Red—Pear-Shaped Yellow—Yellow Plum

PRICES—PAGE 33

Mr. John Manns inspecting single plant selected vines for the future development of stock seed.

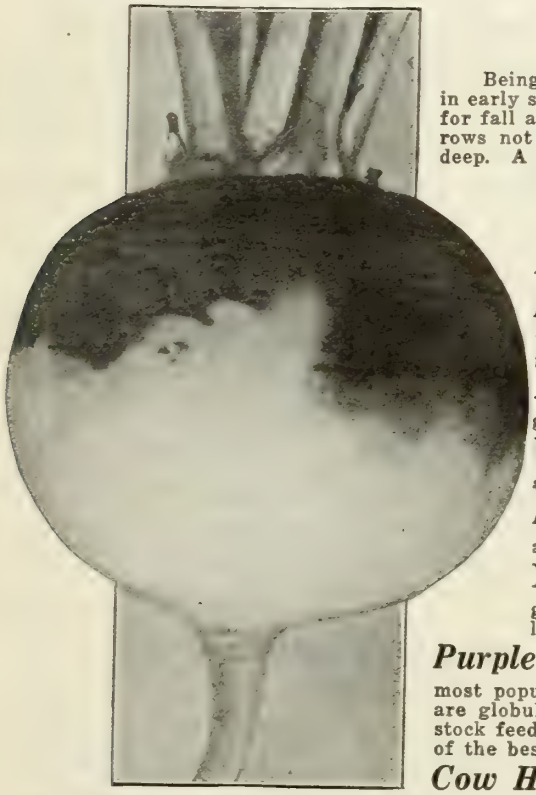
RUTABAGAS OR SWEDES

Rutabagas require about four weeks longer to mature than ordinary varieties of turnips, but are more solid, of firmer flesh and therefore keep later into the spring. They are for this reason more desirable for storage, while turnips are better adapted for the early market. Sow during July either in drills or broadcast.

New Canadian Grown for a number of years in the North and held very closely by private individuals, the seed of this variety has always been extremely difficult to procure in a true and reliable type. After three years of searching and checking in our trial grounds, we have found the correct strain and offer it with every assurance that it will soon become the only Rutabaga grown in this section.

Neckless Purple Top Our superb strain of this excellent variety has become a favorite because of its hardy and productive nature. The flesh is sweet and solid, excellent for table use or stock feeding.

Mr. R. Bunk grows Manns' New Canadian Rutabaga very successfully in Anne Arundel County



Purple Top White Globe Turnip

TURNIPS

1 oz. to 150 feet of drill; 1 lb. per acre.

Being primarily a cool weather vegetable, turnips thrive best when planted in early spring or in the fall. For spring crop sow the seed early in April, while for fall and winter use, plantings should be made from July to August. Sow in rows not less than 18 inches apart and one-half to three-quarters of an inch deep. A very popular method, however, is to broadcast the seed between rows of corn or in the cultivated orchard. Proper control of root maggots is effected by rotation of crops, the use of commercial fertilizers instead of manure and the application of Mag-o-tite or other carbolic acid emulsion.

Extra Early Six Weeks Pure white all over and perfectly globe shaped. Very early.

Extra Early Purple Top Milan A white variety, purple-top and strap leaf. This, with the White Milan, is the earliest of all turnips. Remains in good condition a long time.

Autumn King Sure to become very popular with Market Gardeners; clear yellow with green tinged top, globular and of large size.

White Early Flat Dutch A standard variety, good size, pure white; small top, few leaves and very sweet.

Double Duty Grown chiefly for its abundance of tops, surpassing Seven Top in production and quality. Also forms a pure white semi-globe root, which is sweet and tender.

Yellow Globe Orange Jelly One of the best for general crop; flesh firm and sweet; grows to a large size; splendid for table or stock, and keeps well until late in spring.

Purple Top White Globe Also known as Red Top White Globe. This excellent turnip is decidedly the most popular variety and more extensively grown than any other. The roots are globular, very handsome and of superior quality; either for table use or stock feeding purposes. It is a heavy producer, early, of rapid growth, and one of the best for winter storage.

Cow Horn Very heavy cropper, a quick grower, most practical for stock feed.

Seven Top This variety is principally planted in the South for the green tops which are produced very abundantly.

FOR GREENS—See Broccoli—Page 7.

PRICES

RUTABAGA	Pkt.	¼ Lb.	Lb.
Neckless Purple Top	$ .10	$ .20	$ .50
New Canadian	.10	.40	1.25
TURNIP			
Autumn King	.10	.20	.50
Cow Horn	.10	.15	.40
Extra Early Purple Top Milan	.10	.25	.75

TURNIP	Pkt.	¼ Lb.	Lb.
Extra Early Six Weeks	.10	.20	.60
Double Duty	.10	.40	1.25
Purple Top White Globe	.10	.15	.40
Seven Top	.10	.20	.50
White Early Flat Dutch	.10	.15	.40
Yellow Globe Orange Jelly	.10	.20	.50

MANNS' VEGETABLE PLANTS AND ROOTS

We are large producers of the following plants and can fill orders daily with fresh, strong, stocky plants, grown from the best strains of seed. Varieties not grown by ourselves are contracted for with the most reliable and trustworthy plant growers in this section, who, we know from experience, produce only the best plants.

PLEASE NOTE: All plants are quoted f. o. b. Baltimore. On parcel post orders, 15c per 100 must be added for postage and packing. No shipment can be sent into sections having Japanese beetle restrictions.

Let us Quote in Large Quantities

FROST-PROOF CABBAGE PLANTS
(Ready in February, March and April.)
Early Jersey Wakefield. Copenhagen Market.
Charleston Large Wakefield. All Head or New Early.
35c per 100; $1.50 per 1,000.

CABBAGE PLANTS. Field-grown, strong and stocky.
(Ready May and June.)
All Head Early. Large Late Flat Dutch.
Succession. Imperial Drumhead Savoy.
35c per 100; $1.50 per 1,000.

CAULIFLOWER PLANTS. (Ready in March, July and August.)
25c per doz.; $1.50 per 100.

BORECOLE PLANTS. (Ready in May and June.)
Dwarf Green Scotch.
Postpaid, per 100, 75c.

CELERY PLANTS. (Ready in July.)
Self-Blanching. Golden Plume.
Giant Pascal. Winter Queen.
Easy Bleacher.
75c per 100; $5.00 per 1,000.

EGG PLANTS. (Ready in May and June.)
Mammoth Imp. Purple.
Black Beauty.
20c per dozen; $1.00 per 100.

LETTUCE PLANTS. (Ready in March, April, September and October.)
50c per 100.

PEPPER PLANTS. (Ready in May and June.)
Ruby Giant. Bull Nose.
Chinese Giant. California Wonder
20c per doz.; $1.00 per 100.

SWEET POTATO PLANTS. (Ready May and June.)
Up Rivers. Big Stems. Yellow Jerseys.
50c per 100; $3.00 per 1,000.

TOMATO PLANTS. Hotbed grown. (Ready in April and May.)
Advance. Bonny Best. Marglobe.
75c per 100; $4.00 per 1,000.

TOMATO PLANTS. Field-grown plants. (Ready June and July.)
New Stone. Marglobe.
Greater Baltimore. Pritchard's Scarlet Topper.
50c per 100.

POTTED VEGETABLE PLANTS

Success with transplanting plants depends largely on the condition of the root system. Plants with well established roots, thoroughly protected with soil, are best prepared to withstand adverse weather conditions. We offer strong, well rooted stocky plants from 2-inch pots as follows:

EGG PLANTS PEPPERS TOMATOES
5c each; 50c doz.; $3.75 per 100.

ASPARAGUS ROOTS

From one to two years may be saved by planting Asparagus Roots instead of seed. Choice, 2-year-old roots, Palmetto and Mary Washington.

$1.25 per 100; $8.50 per 1,000.

HORSERADISH ROOTS.
Maliner Kren or Bohemian.
Postpaid, doz., 25c; 100, $1.25.

RHUBARB ROOTS. Best market varieties.
$1.00 per doz.; $7.50 per 100.

STRAWBERRY PLANTS

OCTOBER 15th TO MAY 10th.

We can supply fresh, strong, healthy plants of all the leading varieties in any quantity. Following is a partial list of the most popular sorts for planting in the vicinity of Baltimore.

Dorsett. Most productive, delicious and dependable of all early varieties. **$1.50 per 100; $10.00 per 1,000.**

Big Joe. Midseason. **85c per 100; $5.25 per 1,000.**

Chesapeake. Late, very productive. **90c per 100; $6.00 per 1,000.**

EVERBEARING

MASTODON. Undoubtedly the best everbearing variety in cultivation, producing a large crop of high quality fruit the same year they are set out. The main crop ripens in the fall.

$1.00 per 100; 1,000, $7.50.

Get Our Price on Berry Boxes

MANNS' SUPERIOR FARM SEEDS

Our fair dealing and conservative methods have resulted in an enormous increase in the volume of our field seed business, and we are thoroughly convinced that high quality seed at a reasonable price will make many more pleased customers during this year.

Our experience in this line and our equipment protect you from the many losses which must result from the planting of inferior seed, which is expensive at any price. All seeds offered must strictly conform to our high standards, and purchasers may depend upon our best efforts to supply only seed which is fresh, pure and free from weeds.

Continual market fluctuations make it impossible to quote firm prices here; changes are made almost daily. We shall, therefore, appreciate the opportunity to mail samples and quote the very latest price on any quantity.

When comparing quotations, consider both purity and germination.

GRASS SEEDS

KENTUCKY BLUE GRASS. June Grass. (Poa pratensis.) Universally known; desirable for pastures and lawns. Sow in fall or spring at rate of 2 or 3 bushels per acre. Fancy clean seed.

RED TOP GRASS. (Agrostis vulgaris.) Thrives well in any soil, but best on low land; produces a firm sod. Sow 1 to 2 bushels per acre.

TIMOTHY. (Phleum pratense.) Well known variety. When ready to buy write for latest prices, whether a bag or a carload. (Bushel 45 pounds.)

ORCHARD GRASS. (Dactylis glomerata.) Extremely hardy and widely known. One of the earliest to start in spring; grows rapidly; furnishes an abundance of pasture the entire season. 1½ to 2 bushels per acre. (Bushel 14 pounds.)

RHODE ISLAND BENT GRASS. (Agrostis canina.) Valuable for lawns. Sow 3 to 4 bushels per acre for lawn. 1½ to 3 bushels for pasture. (Bushel 12 pounds.)

TALL MEADOW OAT GRASS. (Avena elatior.) Used for soiling. Succeeds well in sandy lands, and owing to its long, fibrous roots, stands cold and drought well. Sow 3 bushels per acre. (Bushel 10 pounds.)

SWEET VERNAL. (Anthoxanthum odoratum.) Very fragrant, especially when bruised or cut. Mixed with other grasses for pasture it is quite valuable, as it starts early in the spring and grows until late in the fall. (Bushel 10 pounds.)

CREEPING BENT GRASS. (Agrostis stolonifera.) Excellent for pasture when mixed with other grasses; succeeds well in most situations and thrives in moist land. Sow 40 pounds per acre. (Bushel 14 pounds.)

WOOD MEADOW GRASS. (Poa nemoralis.) Recommended especially for low, wet pasture, or for lawns in damp, wet situations. It starts early in the spring and produces a beautiful green turf, which lasts a long time. (Bushel 14 pounds.)

DROUGHT RESISTING GRASSES

PERENNIAL RYE GRASS. (Lolium perenne.) Very nutritious; valuable for meadows or permanent pastures; rapid grower; most prominent grass in England. Sow 1 to 1½ bushels per acre. (Bushel 24 lbs.)

MEADOW FESCUE. (Festuca pratensis.) Thrives in all soil; excellent for permanent pastures; starts early; very productive. Sow 1 to 1½ bushels per acre.

SHEEP'S FESCUE. (Festuca ovina.) Grows naturally on light, dry, sandy soils and mountain pastures; considered quite valuable mixed with other grasses for permanent early spring pasture. (About 12 pounds.)

HARD FESCUE. (Festuca duriuscula.) Not very productive, but it is of a very fine quality, and thrives well in dry situations where many other grasses would fail, thus making a desirable pasture variety.

MILLET

GERMAN OR GOLDEN MILLET. True Southern grown German Millet Seed is far superior to Western grown seed.

HUNGARIAN GRASS. A very valuable forage plant of the Millet family, but not so coarse. Two to three weeks earlier than German Millet.

Orchard Grass.

MANNS' PERMANENT PASTURE MIXTURES

are giving wonderful results. They contain pure seed of high vitality, with varieties proportioned to meet the specific requirements of our individual customers. Let us know your particular needs and we shall be pleased to quote attractive prices.

BIRD SEED

FRESH, RECLEANED STOCK

Postage extra.

Canary	lb. 10c
Rape	lb. 10c
Millet	lb. 10c
Hemp	lb. 10c
Maw, ¼ lb., 10c	lb. 30c
Sunflower	lb. 10c
Lettuce Seed	lb. 25c
Mixed Canary Seed	lb. 10c
Cuttle Fish Bone	lb. 40c

CLOVERS

MEDIUM OR COMMON RED. (Trifolium pratense.) The Clover Seed of Commerce, and the most important and valuable of the Clover family for agricultural purposes. Sow 15 pounds per acre. (Bushel 60 pounds.)

ALSIKE OR HYBRID. (Swedish.) (Trifolium hybridum.) Hardiest of all Clovers; perennial. On rich, moist soils it yields large quantities of hay or pasturage, as it forms a thick bottom; has fibrous roots like White Clover. Esteemed highly by bee keepers.

MAMMOTH CLOVER. (Trifolium pratense perenne.) Valuable with other grasses for mixed hay; ripens about with Timothy. Being a rank grower, it is largely used for plowing under as a fertilizer.

WHITE DUTCH. (Trifolium repens.) Grows naturally in pastures in a great variety of soils and situations; indispensable in parks and lawns.

CRIMSON CLOVER. (Trifolium incarnatum.) Being an annual, it must be sown in July, August and September of each year, and, the spring following, can be cut for soiling by April 20th; for ensilage, May 1st to 15th; for seed, about first week of June. Can be grown in corn, or any cultivated crop. Ten to fifteen pounds necessary to seed an acre. Cover with a light harrow. (Bushel 60 pounds.)

ALFALFA OR LUCERNE. (Medicago sativa.) This Clover claims to bear the palm as a forage plant, coming earliest in spring and remaining latest in fall. It delights in plenty of sun, being a veritable child of the sun; must be sown at the rate of from 10 to 25 pounds of seed per acre on well drained, well pulverized, deep soil after danger of freezing is over, and prefers sand or gravel sub-soil. Wet sub-soil is fatal to the plant. Roots 3 to 4 feet deep, and when well established lasts for years. 2 to 3 crops a year can be cut. Not recommended for pasture. (Bushel 60 pounds.)

BOKHARA OR WHITE BLOSSOM SWEET CLOVER. (Melilotus alba.) This slightly resembles Alfalfa in growth, but is much taller, with leafier and stiffer stems. It frequently grows 5 to 6 feet in height and branches freely, with slender spikes of small, fragrant, white flowers, which afford an excellent food for bees. (Bushel 60 pounds.)

JAPAN CLOVER. This makes most nutritious and desirable summer pasture. Grows well and spreads rapidly on poor lands, hillside and under the shade of trees. (Bushel 25 pounds.)

DWARF ESSEX RAPE

This plant is extensively grown for forage, especially for sheep, and for green manure. Prepare the ground as for turnips and sow in June or July in rows two and a half feet apart at the rate of two and a half pounds of seed per acre.

SORGHUM OR CANE

EARLY AMBER SORGHUM. Furnishes a large yield of most nutritious forage, which can be fed either green or cured, and will yield two or three cuttings a year, stooling out thicker each time it is cut. It grows ten or twelve feet high. Sow at the rate of one peck per acre in drills three and a half to four feet apart.

EARLY ORANGE SORGHUM. This variety is similar in growth to Early Amber, but under fair conditions produces a heavier crop. It is better for stock feeding than the Amber.

CYCLONE SEED SOWER

Has a national reputation as absolutely the best hand sower on the market.

Price—$2.50 each Postpaid

SUDAN GRASS

Sudan, the greatest forage crop, should be grown on every farm, where either hay or pasture is desired. It is highly resistant to drought and stands very heavy grazing. Yields from 2 to 10 tons per acre, is superior to either Millet or Sorghum in feeding quality, and may be fed in unlimited quantities.

Sow 10 to 20 pounds per acre, 1 to 1½ inches deep, the highest quality hay resulting from heavy seeding. Should be harvested just before the heads appear, in the same manner as other grasses. Cures quickly and matures as early as Millet, the first cutting being ready in about 6 to 8 weeks.

Successive cuttings may be made every 30 to 45 days until frost. Highly recommended by the Government as being very nutritious and easily digestible. Being an annual, this must be seeded every year and therefore never becomes a pest.

COW PEAS

There is no surer or cheaper means of improving and increasing the productiveness of our soils than by sowing the Cow Pea. It has the power to extract costly nitrogen from the atmosphere and to store the same in the vines and roots, so that the land is enriched and its condition improved. From five to nine tons of green fodder per acre have been produced. For ensilage they are unsurpassed. When it is desired to turn the whole crop under, as a soil improver, it is better to do so after the vines are partly dead. Cow Peas can be sown in May or June, at the rate of one and a half bushels per acre.

WHIPPOORWILL. A favorite early bunch-growing variety. A prime favorite in the North and West on account of its early maturity and habit of growth.

SOY OR SOJA BEANS

A Great Drought-Resisting Forage Crop, Producing Immense Quantities of Nutritious Food, Besides Being an Excellent Soil Improver.

The Soy Bean is coming right to the front as a great soil enricher, as a food for hogs or cattle, both in the green and dry state. To plow under in the green state it is certainly one of the very best plants, next to Cow Peas.

CANADA FIELD PEAS

Sown in open weather during December, January, February and March, making large yields of most nutritious food, which can be used either green or cured for hay. It also makes a good green manuring crop to turn under, but not equal to Cow Peas. A light seeding of oats, rye or barley will increase the yield and help to support the vines when the crop comes to maturity. Ready for cutting in May and June, cures easily and makes splendid hay.

BUCKWHEAT

JAPANESE. This variety yields very largely. The kernels are larger than other sorts, but owing to its branching qualities it need not be sown so thickly.

SILVER HULL. A superior variety in every way to the ordinary Buckwheat which it has almost entirely superseded.

OATS

WHITE SPRING OATS. Our best recleaned stock of these are Choice Northern grown, all heavy oats, which have been recleaned by us.

RUST-PROOF OATS. A favorite spring variety in the South, particularly where the land is rich; produces enormous yield, and excellent for cutting for hay.

WRITE for Samples and Prices on Most Profitable Varieties WHEAT—RYE—BARLEY.

INOCULATE

All Legumes

Alfalfa, all Clovers, Soy Beans, Cow Peas, Peas, Beans, Vetch, Peanuts with

NITRAGIN

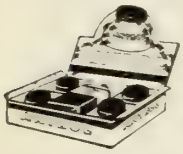
Trade Mark Registered

For profitable results, Agricultural Colleges advise inoculation for all legume seed, because it pays well in producing larger quality yields. Fresh, high count NITRAGIN, containing billions of nitrogen-gathering germs build up the soil.

See Page 64

DUSTING AND SPRAYING MATERIALS

"READY FILLED" ANTROL SET



Consists of four patented glass feeders filled with regular Antrol Syrup, ready for use. **Set 50c.**

Individual Ready Filled Feeders, **15c each.** Not Mailable.

ANTROL DESTROYS ANTS IN THEIR NESTS

New Method "Gets" Them at Their Source—Safe, Permanent, Effective

The Antrol system is adapted to any size house or garden, composed of small glass containers and a special formula of syrup. The ants smell the syrup, eat it and then transmit its mild poison to the queen in the nest. Soon the entire ant colony is destroyed!

Prices—Antrol sets containing 4 containers and 1 4-ounce bottle of syrup, 75c.; Antrol extra containers (each), 10c; Antrol syrup, 4-ounce bottles, 35c; pints, 85c.

ARSENATE OF LEAD

For destroying leaf-eating insects, not harmful to the foliage, greatly adhesive. Powdered arsenate of lead is more economical than other forms.

Prices—Powder, 1 lb., 25c; 4 lbs., 75c; 100 lbs., $15.00; 500 lbs. or more, 13c lb.

ARSENITE OF ZINC

Kills quicker than Arsenate of Lead, adhesive and less liable to burn foliage than Paris Green. Excellent for potatoes. Lb., 25c; 4 lbs., 75c; 100 lbs., $18.00.

BORDEAUX-ARSENATE OF LEAD

3 to 7 pounds to 50 gallons of water.

To kill leaf-eating insects and control fungous diseases; a double purpose spray in one application. **Lb., 35c; 4 lbs., $1.25; 100 lbs., $22.00.**

BORDEAUX

(12½ Per Cent Metallic Copper)

Use 8 pounds to 50 gallons of water.

For preventing many fungus growths, blights, etc. May be either sprayed or dusted. Powder, 1 lb., 25c; 4 lbs., 75c; 100 lbs., $15.00.

Black Leaf 40 FRIEND of Growers and Poultry People!

40% Nicotine. The world's leading contact insecticide and poultry delouser. Always dependable. "A little goes a long way."

Kills Aphis, Thrips, Leaf Hoppers and

other insects on garden, farm and orchard crops by contact and fumes—an advantage not possessed by non-volatile, non-poisonous spray materials.

Also Kills Poultry Lice . . .

Merely paint tops of perches with "Black Leaf 40." Body heat from roosting birds creates fumes which penetrate feathers and kill lice and feather mites.

Oz., 35c; 5 ozs., $1.00; 1 lb., $2.25; 2 lbs., $3.25; 5 lbs., $5.85; 10 lbs., $9.85.

CARBOLA

Is a white paint and a powerful disinfectant combined in powder form. Just mix it with water and it's ready to be applied with spray pump or brush.

Carbola applied to the walls, ceilings, partitions, nests, etc., of your poultry houses will help to prevent contagious diseases among your flock. It will aid in keeping your fowls free from profit-destroying ravages of lice and mites.

5 lbs., 75c; 10 lbs., $1.25; 50 lbs., $5.00.

CARBON DI-SULPHIDE

Specified by U. S. Dept. of Agriculture for treatment of soils to destroy grubs of the Japanese Beetle.

Also used for control of insects in grain.

Lb., 35c; 5 lbs., $1.25; 100 lbs., $11.00. Plus deposit on Drum.

ANSUL COLLOIDAL SULPHUR

A general fungicide and contact insecticide. Controls scale, rust leaf and black spot, mildew and brown rot on flowers, shrubs, shade and fruit trees. Kills red mites and red spider. Dilution 3 pounds to 100 gallons. **½ lb. tubes 90c each; 3 lb. bottle $2.00.**

CORONA COPPERCARB

Grow clean wheat free from bunt or stinking smut and receive top prices for your crop. Corona Coppercarb is a dust recommended by experimental stations to be applied dry to seed wheat any time before sowing. Use 2½ to 3 ounces per bushel of wheat. **5 lbs., 75c.**

CYANOGAS

A—To kill ants, rats, moles, fleas, bed bugs, moths, bats, grape mealy bugs, melon Aphis. ½-lb. tin, 45c; 1 lb., 75c; 5 lbs., $3.00.

G—For greenhouse, bulb, grain, soil, household, warehouse fumigations. 5 lbs., $3.00; 25 lbs., $10.00.

DAWG-GONE

Protect that evergreen. Keep dogs away. Remove cap and hang in lower branches of trees at points of approach. **35c tube, 3 for $1.00.**

Bean Beetle Dust and Sprays

BARIUM FLUOSILICATE

Highly recommended by the University of Tennessee Experimental Station.

Practically non-poisonous, can be either sprayed or dusted.

For Spraying 1 pound to 50 gallons.

For Dusting 6 pounds per acre.

1 lb. 25c; 100-lb. drum $20.00.

20—20—60 DUST

$8.50 per 100 lbs.

DOW'S MAGNESIUM ARSENATE

Magnesium Arsenate (pure) 2-lb. pkg., 60c; 100-lb. drum, $22.00.

Magnesium Arsenate Dust Mixture, 4-lb. pkg., 60c; 100-lb. drum, $12.00.

DUBAY

SEED DISINFECTANTS

These effective seed disinfectants are sold by the Bayer-Semesan Company, a consolidation of E. I. du Pont de Nemours & Company, Inc., and The Bayer Company, Inc. They comprise the following products:

SEMESAN—For vegetable and flower seeds. 2 oz., 50c; lb., $2.75; 5 lbs., $13.00.

SEMESAN, JR.—For corn. 4 oz., 50c; 1 lb., $1.75; 5 lbs., $8.00.

SEMESAN BEL—For potatoes. 4 oz., 50c; 1 lb., $1.75; 5 lbs., $8.00.

CERESAN—For grains. 1 lb. 75c; 5 lbs., $3.00.

NEW CERESAN—For wheat. Lb., 75c; 5 lbs., $3.00.

DUSTING AND SPRAYING MATERIALS (Continued)

NEW EVER GREEN SPRAY

A NEW SIMPLE WAY TO KILL GARDEN INSECTS

No complicated instructions. Simply buy New Ever Green Spray, mix with water—and spray. This perfected pyrethrum spray kills both chewing and sucking insects. Harmless to man, plants and animals.

1-oz. bottles, 35c; 6-oz. bottles, $1.00; 16-oz. bottles, $2.00; 1-gal. bottles, $9.50; 5-gal. bottles, $42.50.

FISH OIL SOAP

Keeps trees, plants and vines clean and healthy, effectively controlling sucking insects and many forms of scale. **Price, 1 lb., 30c; 5 lbs., $1.25; 25 lbs., $2.50; 100 lbs., $8.50.**

FORMALDEHYDE

Extensively used in the preparation of potatoes for seed, as a preventative against potato scab and to destroy other germs on the seed. Will also control some forms of grain smut. For potatoes a solution of 1 pint to 15 or 20 gallons of water is made and cut pieces are soaked for 2 hours. One to two gallons of this will be sufficient for 1 bushel of seed. **Pt., 45c.**

FORMALDEHYDE DUST

Is a seed and soil treating compound which controls seed borne diseases and when applied to the soil controls "damping off" and other root rots of vegetable and flower seedlings. Usually applied 1 lb. per 10 sq. ft. **1 lb., 75c; 5 lb. can, $2.00.**

FUNGTROGEN

An effective and scientific preventive and remedy for mildew, black spot and many fungus diseases of Roses and other plants. Dilute one part to 60 parts water. **½ pt., 75c; pint, $1.25.**

GRAPE DUST

A readily diffusible, light weight powder fungicide, very efficient in destroying mildews and preventing blights. **5 lbs., 80c.**

KAY-SO

A combined adhesive and spreader, making spray materials more economical and effective, inexpensive. Use 1 pound to each 100 gallons of spray.

2-lb. pkg., 40c; 10-lb. pkg., $1.85.

LEMON OIL

Soluble in water; will destroy Aphis, Rust, Scale, and Bugs on Palms, Ferns, Rose Bushes, etc. Highly recommended as a wash for dogs and other animals, destroying lice and relieving mange.

½ pt., 30c; 1 pt., 50c.; 1 qt., 85c.

LIME AND SULPHUR SOLUTION

The popular spray material for dormant spraying against scale and as a Summer spray against certain fungus diseases.

1 qt., 35c; 1 gal., 75c; 5 gal., $2.85; 50 gal., 13c per gal.

DRY LIME AND SULPHUR

Dormant Season: 12 lbs. to 50 gallons.
Growing Season: 3 lbs. to 50 gallons.

Just as effective as liquid but more economical because of the absence of water. Dissolves readily in cold water and complies with Government specifications. **1 lb., 30c; 5 lbs., $1.25; 12½ lbs., $2.00; 200 lbs., $20.00.**

NICO-FUMELIQUID

Very powerful tobacco extract. Soluble in water. Guaranteed 40 per cent nicotine.

¼-lb. tin, 75c; 1-lb. tin, $2.00; 4 lbs., $5.85; 8 lbs., $10.85.

NICO-FUME

This is the strongest tobacco paper on the market. Does not injure blooms and furnishes the easiest method of fumigation ever devised.

Tin box of 24 sheets, $1.25; 144 sheets, $4.75; 288 sheets, $8.25.

NICO-FUME TOBACCO POWDER

Tobacco powder impregnated with a high strength nicotine solution. Effective for fumigating in greenhouses to destroy aphis, thrips, etc. **Lb., $1.00; 5 lbs., $3.35; 10 lbs., $5.85.**

NICOTINE DUST

Extremely valuable for combating pea lice, aphis, etc.

100-lb. drum, $16.00.

OIL EMULSION

Contains 83 per cent of refined petroleum oil. Kills scale and many other over-wintering insects on trees; is safe and easier to use. A dormant spray which penetrates into all cracks and crevices, thus insuring better coverage. 50 gallon steel drum. **83%—mix 1 to 25—23c. gallon; 66 2-3%—mix 1 to 20—16½c gallon.** (Plus $1.50 deposit on drum, returnable.)

PARIS GREEN

A poisonous, insoluble powder similar to arsenic in its effects; used extensively against potato bugs, worms and caterpillars, etc.

¼ lb., 15c; 1 lb., 45c; 5 lbs., $2.00.

PURE PARA-DICHLOROBENZENE

For Peach Borer Control

Very powerful and effective remedy just coming into general use as a result of the experiments of the Department of Entomology. Should be applied September 1st to October 10th, according to latitude. Some growers prefer to make two applications, the first being in the month of June. One pound is sufficient for 10 to 30 trees, according to size. It is not advisable to treat trees under 4 years of age with Para-Dichlorobenzene, and apple trees should never be treated.

1 lb., 40c; 5 lbs., per lb., 35c; 10 lbs., per lb., 30c; 25 lbs., per lb., 22c; 100 lbs., per lb., 20c.

Pyrox kills bugs —*prevents* blights

ALL you have to do to keep your farm crops free from leaf-chewing insects and fungus diseases is this: Mix Pyrox with water and spray. No need to waste time and effort mixing Bordeaux and arsenicals.

We recommend Pyrox because it will not clog the smallest nozzle. It comes out a fine mist and covers the foliage completely, sticking to the leaves even through the hardest rains. Insects die. Blight is prevented. Your farm has a chance to show what it really can do for you! There is a size of Pyrox to suit every need!

Nicotine Pyrox

If you have a garden patch, you will want a jar of the new Nicotine Pyrox—Standard Pyrox treated with Nicotine. It not only kills leaf-chewing insects, prevents blight and other diseases, as Standard Pyrox does, but it also kills *sucking insects*, such as aphis, thrips and leaf-hoppers. Standard Pyrox, of course, is designed for most commercial crops, but in the garden, where sucking insects do so much damage, you will want Nicotine Pyrox.

Just mix
Pyrox
with water—and spray.

1	lb	$ .50
5	lb	1.75
10	lb	3.00
25	lb	6.25
50	lb	7.25
100	lb	12.50
300	lb	30.00

NICOTINE PYROX

10-oz. Jar, 50c; 40-oz. Can, $1.25.

DUSTING AND SPRAYING MATERIALS (Continued)

Dust with Pomo-Green

A complete dust that will control black-spot, mildew, and insects on roses and all flowers in general.

1 lb., 50c; 5 lbs., $1.75.
With Nicotine—1 lb., 75c; 5 lbs., $3.00.

RED ARROW

Economical and efficient contact spray, non-poisonous, will not injure blossoms, foliage of fruit; positive death to all types of insects. Poison sprays only kill if eaten, while **Red Arrow Pyrethrum Spray kills** every insect it strikes.

1 oz., making 4 to 6 gal..... **$ .35**
¼ pt., making 17 to 25 gal..... **1.00**
½ pt., making 35 to 50 gal..... **1.75**
1 pt., making 70 to 150 gal..... **3.25**
1 qt., making 140 to 200 gal..... **6.00**
1 gal., making 560 to 800 gal..... **20.00**

ROTECIDE
The Standard Rotenone Spray

ROTECIDE

The Standard Rotenone Spray is the most modern and fool-proof method of insect control. Rotecide is a complete spray, simply add water. It kills every type of insect, worm or beetle. Very good for Mexican bean beetle. Harmless to delicate plants and non poisonous to humans, animals, and bird life. **Quart can, $3.00; gallon can, $8.00.**

SCALECIDE
—THE COMPLETE DORMANT SPRAY—

Prices—Qt., 60c; gal., $1.40; 5 gals., $4.90; 10 gals., $8.50; 15 gals., $10.00 (plus $2.00 deposit on drum); 30 gal., $16.50 (plus $2.50 deposit on drum); 50 gals., $23.50 (plus $3.00 deposit on drum). (Freight to factory to be deducted from refund.)

SLUG SHOT

(Hammond's.) Guaranteed to destroy potato bugs, cabbage worms, lice, fleas, beetles, striped bugs, etc., on currants, egg plants, melons, turnips, beets, etc.; canker worms and caterpillars on fruit and ornamental trees.

1-lb. sifter, 25c; 5-lb. pkg., 75c; 100 lbs., $10.50.

SNAROL

A ready prepared bait meal that means sure death for cut-worms, snails, slugs, sowbugs, and other garden pests. Harmless to vegetation, safest to use, not affected by rain or sprinkling. **1½ lb. pkg., 35c; 4 lb. pkg. 85c.** Not Mailable.

STRAWBERRY DUST

85-15 Mixture successfully used for many years. **1 lb., 15c; 10 lbs., $1.00; 25 lbs., $2.25; 100 lbs., $6.50.**

SULPHUR

Commercial Flour of Sulphur. **1 lb., 6c; 10 lbs., 50c; 25 lbs., $1.00; 100 lbs., $3.00.**

Superfine Dusting Sulphur. **1 lb., 10c; 10 lbs., 70c; 25 lbs., $1.25; 100 lbs., $4.25.**

SULFOCIDE
A Better Summer Spray

Sulfocide is a highly concentrated non-poisonous liquid sulfur fungicide—entirely distinct from lime-sulphur.

Prices — Pt., 50c; qt., 85c; gal., $2.25; 5 gals., $7.50; 10 gals., $13.50; 30 gals., $33.00; 50 gals., $50.00.

TAROCIDE

A very dependable dormant spray for trees, kills the eggs of aphis, red mite, pear psylla, scale insects, etc. Mix 1 to 20. **54 gallon drum, 30c gallon; 28 gallon drum, 32c gallon.** (Plus $1.50 deposit on drum, returnable.)

THALATE ANT TRAPS

This is the simplest, safest and most effective trap available. Controls both sweet and grease eating ants. A twist of the wrist and its ready to use. Can be used in greenhouses, household, and on the golf courses. **25c each.**

TOBACCO DUST

Excellent insecticide and fertilizer combined, extensively used against black and green aphis, fleas, beetles, etc. Finely powdered and high in nicotine content.

1 lb., 10c; 10 lbs., 50c; 100 lbs., $3.00; ton, $50.00.

TOBACCO STEMS

(Black Leaf Ground), valuable as fertilizer and humus—**10 lbs., 25c.; 100 lbs., $1.50; ton, $20.00.**

TREE TANGLEFOOT

Applied directly to the bark of trees, protecting them from climbing insect pests. Easily applied and will remain sticky for three months fully exposed to the weather.

1-lb. can, 50c; 5-lb. can, $2.25; 10-lb. can, $4.25.

TRI-OGEN

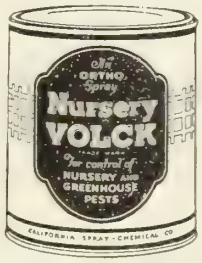
A highly concentrated insect spray and fungicide for garden and greenhouse plants. Stimulates plant growth and is harmless to foliage or blooms. **Small kit (makes 16 quarts), $1.50; medium kit (makes 64 quarts), $4.00.**

WILSONS O. K. PLANT SPRAY

For aphis, thrip, mealy bugs, scale, rose bugs, and other insects. **½ pt., 40c; qt., $1.00; gal., $3.00.**

VOLCK

For Safe and Sane Control of Nursery, Garden, and Greenhouse Insects



VOLCK is one of the most powerful insecticides known. Even mildews and rusts are prevented and stopped by VOLCK. Not only does VOLCK give effective control of pests, but it also prevents reinfestation for a considerable period; is odorless, colorless and non-poisonous.

Volck Does Not Burn the most tender foliage. Coleus, cyclamen, evergreens, ferns, orchids and many other types of plants can be sprayed with safety.

Prices — ½-pint cans, 35c; 1-quart cans, 80c; 1-gallon cans, $2.50; 5-gallon cans, $7.50.

FAIRMOUNT

The Original Weed Killer

The Standard since 1892. Positively destroys any kind of weed and vegetation wherever applied. One gallon Fairmount Weed Killer makes 50 gallons of treating liquid, sufficient to effectively cover 100 to 150 square yards. Just the thing for driveways, tennis courts, baseball diamonds and walks where weeds are not wanted. Will not injure or discolor marble, gravel or stone—but makes them clean and bright. Fairmount Weed Killer acts by destroying seeds, germs and roots of plants.

Qt., 70c; ½-gal. can, $1.00; 1-gal. can, $1.75; 5-gal. can, $7.25; 30-gal. drum, $33.00.

SPRAYERS

THE "MISTY" SINGLE ACTION

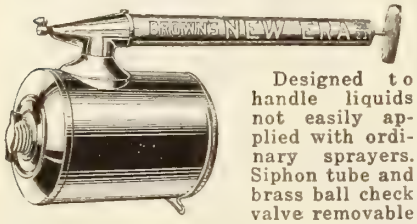
A low-cost sprayer, made of heavy tin for general purposes; holds one quart.

Misty ..... **$ .45**
Acme, ½ pt ..... **.20**

GLASS JAR SPRAYER

Holds one quart; has long, powerful pump; two discharge tubes, which send the spray over a wide area. **Price, 75c.**

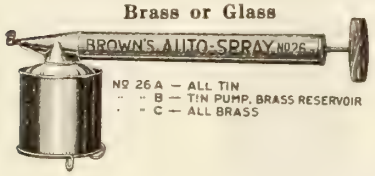
NEW ERA No. 23C



Designed to handle liquids not easily applied with ordinary sprayers. Siphon tube and brass ball check valve removable for cleaning. A steady spray of great volume can be maintained with very little effort. 1 gallon capacity.

All Brass—Cheaper when long life is considered **$2.10**

AUTO SPRAY No. 26C and 26BG
Brass or Glass



This continuous atomizer will spray insecticides in a continuous fog of great volume. Unequaled for small garden and house plant sprays.

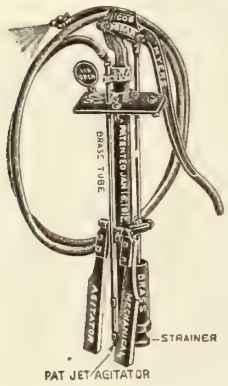
Glass, $1.10; Brass, $1.35; Ace, glass continuous, 70c.

No. 26-D—Heavy brass pump and copper tank. $1.50.

CONTINUOUS

Heavy tin, fitted with cupped plunger leathers; all working parts brass. Tank heavy tin; capacity 1 quart. **Price, 75c.**

COG-GEAR BARREL SPRAY PUMP



The construction is such that the entire pump sets inside the barrel containing the liquid, being bolted fast at its upper end to the head of the barrel.

Has bronze ball valves and brass seats. The air chamber is 32 inches in length, enabling the pump to throw a uniform, constant and elastic spray.

It has good leverage, is very powerful and easily operated. Complete with 15 feet of ½-inch, 5-ply hose, Vermorel or Bordeaux nozzle and agitators. **Price, No. R305B, $15.00. No. R318B (illustrated), $16.00. No. R308B, $25.50.**

PERFECTION

This is the most powerful machine in its class. The barrel is 7½ inches in diameter and 20 inches high. The pump is 1¾ seamless brass tubing. The valves are metal and work automatically from 8 to 15 minutes, and may be recharged in 12 seconds. **Galvanized Steel, $6.25; Brass, $9.60.**

HUDSON JUNIOR SPRAYER

Capacity about 2½ gallons. Shipping weight 8 pounds. **No. 140G, Junior with galvanized tank, $4.95. No. 140B, Junior with brass tank, $6.65.**

HUDSON ECONOMY SPRAYER

The Economy sprayer meets the demand for large capacity at a minimum cost. (No. 125.) Capacity 3¾ gallons. With galvanized tank. **$5.00.**

HUDSON FAVORITE SPRAYER

The Favorite is a high pressure compressed air sprayer. Four gallon capacity galvanized all riveted tank; pump is seamless brass tube. **$5.50.**

HUDSON STERLING SPRAYER

A high grade sprayer at a very moderate price. Four gallon capacity tank. **115G galvanized, $4.20; 115B copper, $6.00.**

"KANT KLOG" COMPRESSED AIR SPRAYER

Brass tank, $3.50.

LITTLE GIANT AND PEERLESS BUCKET SPRAY PUMPS

Made entirely of brass, malleable footrest, provided with large air chamber and throws a continuous spray. **Price, with 4 ft. ½-inch hose and two nozzles, $3.75.**

PERFECT LEVER BUCKET SPRAY PUMP

The air chamber is 50 per cent larger than the Little Giant Sprayer. **Price, complete with agitator, hose and nozzle, $6.00. 8-foot extension pipe, 75c.**

AUTO SPRAY No. 9

Tank of heavy, best quality sheet brass or strong copper bearing galvanized sheet steel. Air Pump of one-piece seamless brass with new all-metal brass ball check valve. Capacity 3½ gallons.

Copper, $9.90; Galvanized, $6.65.

AUTO SPRAY No. 50

Capacity 2½ gallons. **Brass, $8.30; Galvanized, $5.60.**

BROWN'S CHALLENGER SPRAYER

An economical compressed air sprayer of 3¾ gallons capacity. Made of heavy copper bearing galvanized steel sheet with brass screw locking cap. **$4.00.**

BROWNS BLUE RIBBON JR.

An excellent small capacity compressed air sprayer. Tank made of copper bearing galvanized steel, capacity 2 gallons, equipped with strong strap, spray hose, all metal automatic shut off, seamless brass extension and screen non clog nozzle. **$4.10.**

JUNIOR No. 5 BUCKET SPRAYER

Does away entirely with the objectionable foot-rest, clamps, leather suction, packing, etc.

This Pump requires no fastening of any kind, holds itself down and works anywhere and everywhere.

Will pump from a pail, barrel, tank, spring or creek. Weighs only 4 pounds and is ready for instant use everywhere.

Price, $3.85.

JAPANESE BEETLE TRAPS

Nesco Brand. Fit any pint jar, attractive green color. Price each with Bait, 35c.

SPRAYERS AND DUSTERS

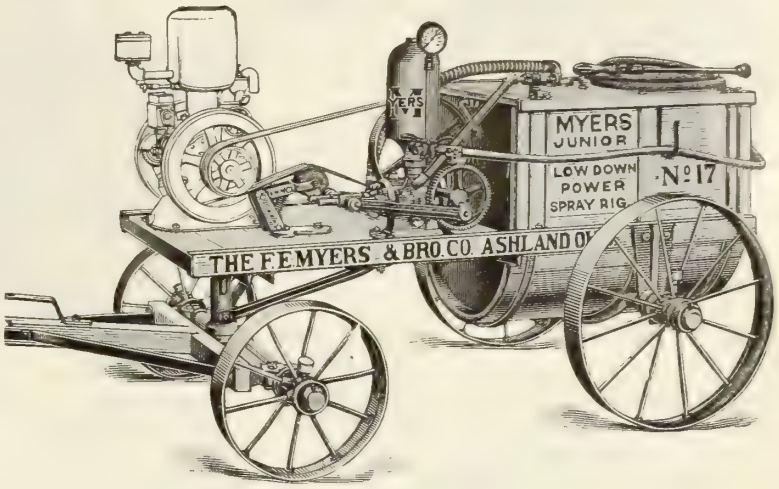
MYERS POWER SPRAYERS

The use of an efficient power sprayer assures a better crop because the spraying can be done more thoroughly and more rapidly, making it possible to spray just at the proper stages in the development of the fruit blossoms. A power sprayer will very soon pay for itself on any orchard two acres or over.

The **No. 17 Junior,** illustrated, is equipped with a 100-gallon tank, all-steel truck and double-acting pump, belt driven (engine not included), one Myers Spray Gun, 25 foot High-pressure Spray Hose, pressure gauge, agitator, belt tightener, relief valve, etc. **Price, $195.00.**

No. 729 Junior. Self-oiling, same equipment As above but without truck, $148.00

Engine prices on application. 1½ to 2 h. p. required.



LOW DOWN SPRAY PUMP

R309B. This is an entirely new type of pump, with double the power of any other. Fitted with removable 2½-inch brass cylinders and poppet valves, and adapted for the use of hot or cold mixtures. They are built for use in extensive spraying operations of any kind, as their capacity is sufficient to carry from 1 to 3-leads of hose. Complete with 6 feet wire bound suction hose, 15 feet of 7 ply discharge hose, 8-foot extension pipe and one Fembro nozzle. **Price, $43.00.**

Illustrating No. 316B with No. 1 Attachment.

No. 316B. Complete outfit, cog gear double action Spray Pump mounted on platform with very substantial 50-gallon barrel. Mechanical agitator, pressure gauge, 15 feet of ⅜-inch, 7-ply discharge hose, nozzle, 8-foot pipe extension and lever shut off. Equipped with No. R309B low down pump described above. **Price, $54.00.**

No. 1. Three row spraying attachment, for use with No. 316B Sprayer as shown in illustration. Very economical equipment for market gardeners, can be very effectively used for spraying beans, potatoes, tomatoes, etc. Adjustable for any width row. **Price, $20.00.**

SUNSHINE WHEELBARROW SPRAYER

Especially useful for spraying operations where large capacity but compact construction are required. Has two 16-inch wheels, 5-foot spray hose, 2-foot extension and angle nozzle. Capacity 12½ gallons. **$12.50.**

IDEAL PORTABLE SPRAYER

An ideal wheelbarrow type sprayer with 15-gallon galvanized tank and operated with a large removable barrel pump. The frame is made of heavy steel tubing reinforced with channel iron cross braces. Discharge equipment consists of 6-foot spray hose, 4-foot extension pipe, an Ideal angle nozzle and leakless shut-off. **No. 34, $21.00; No. 33**—above outfit with air pressure tank and 200-pound pressure gauge, **$31.75.**

Brown No. 30D—12 gal. capacity **$12.15**

MEYERS "HANDY"

The Myers Handy Portable Sprayer is made for general use about the home, greenhouse or orchard, for spraying or whitewashing. Fitted with cog gear handle. Has the No. R318B pump, rigidly placed in an extra heay galvanized iron tank of 12½ gallon capacity. Complete with dasher agitator, 15 feet ½ inch 5-ply discharge hose, extension rod and nozzle. **Price, $25.00.**

CRYSTAL DUSTER

A large capacity single barrel producing a voluminous cloud of dust. Especially useful for the gardener having a moderate amount of dusting to do. **Price, $1.25.**

HUDSON DUSTERS

No. 604

Very effective for controlling insects on beans, potatoes, tomatoes, cabbage, melons, cucumbers and other garden truck.

All parts are pressed from lead coated sheet steel, attractively painted and finished. Gears are steel, machine cut, housed in a dust proof case filled with oil. All bearings are self lubricating. Discharge equipment consists of two nozzles, two elbows, a Wye connection, and four 15-inch tubes. Can be used with one or two nozzles, arranged for dusting from above or under surface of low lying plants, shrubs, etc.

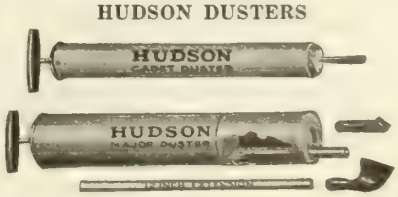
No. 603—Simple in construction, light in weight, well balanced and very effective in operation. Rotary agitation prevents clogging. Capacity 3½ to 7 pounds, depending upon material used. **$8.00.**

No. 604—Develops unusually powerful air blast and has two agitators, one rotary and one oscillating. Capacity 5 to 10 pounds, depending upon the material used. **$13.50.**

FEENY MODEL B

The Feeny Model B is one of the most popular dusters made. It is easily filled, operated with greatest ease, is very effective, saves material and requires no cleaning. **$1.00 each.**

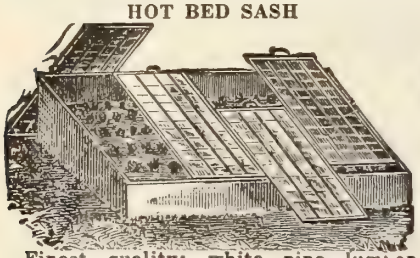
HUDSON DUSTERS



Cadet, Powder Reservoir, 1¾x4 inch, each, 50c.

Major, Powder Reservoir, 2¾x5 inch, each, $1.25.

HOT BED SASH



Finest quality; white pine lumber, free from knots, substantially made, grooved for glass to lap or for putty (unglazed). $1.75 each; 10, $16.50.

HOT BED GLASS

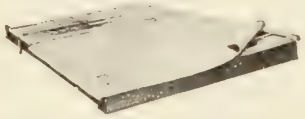
1 box of glass will glaze 3 sash, 8x10 and 10x12. $2.50 per box.

HOT BED MATS

Burlap. Made of strong burlap interlined with wool.

Size, 40x76 inches, each $1.50
Size, 76x76 inches, each..... 2.60

MILO WATERPROOF HOT BED MATS



Made from heavy weight burlap, absorbent pulp and felt cemented together with a specially prepared waterproof compound. This combination forms a covering both airtight and waterproof. Easy to handle. Wear for years. Milo mats are made in sizes 40x78 inches and 78x80 inches, also in continuous lengths. **40x78 inch, $1.50 each; 78x80 inch, $3.00 each.**

MARLINE

Made from Indian Hemp and the best product in making Straw Mats. Furnished in 1 and 5-pound balls. **Per pound, 25c.**

PEERLESS GLAZING POINTS

Price, per box of 1,000, 65c. Pincers, per pair, 70c; by mail, 75c.

PUTTY BULBS

A very useful tool for applying liquid Putty and Mastica for glazing Sash or Greenhouses. **Large size, $1.35.**

MASTICA

For glazing greenhouses, sashes, etc., new and old. It is elastic, adhesive and easily applied. It is not affected by dampness, heat or cold. **Price, 1 gal., $2.25.**

MASTICA GLAZING MACHINE

Price, $2.25

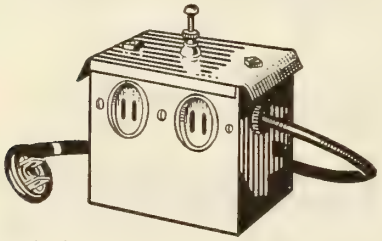
TWEMLOW'S OLD ENGLISH GLAZING PUTTY

Semi-Liquid

For bedding glass in sash and filling cracks or seams in roof joints or frames of greenhouses or hotbeds.

16-pound can (1 gallon capacity), $2.35

ELECTRIC HOT BED HEATER



With this thermostat and 2-60 ft. heating cable, four sash, or a total surface 6 ft. by 12 ft., can be economically heated. B-47 Thermostat only. Weight 4 lbs., $5.75 each. B-48 60 feet heater wire. Weight 7 lbs., $4.25 each.

GALVANIZED WATERING POTS "WIDE SPOUTS"

Made of heavy galvanized iron, with removable Sprinkler.

4 qt.	6 qt.	8 qt.	10 qt.	12 qt.	16 qt.
$ .55	$ .65	$ .70	$ .80	$ .90	$1.00

HOSE NOZZLES

Mystic Spray Nozzle.....$ .30
Justrite Spray Nozzle..... .45

WOODEN LABELS

		Painted	Plain
4	inch pot, per 1,000.....	$2.00	$1.60
4½	inch pot, per 1,000.....	2.10	1.70
5	inch pot, per 1,000.....	2.20	1.80
6	inch pot, per 1,000.....	2.50	2.00
12	inch pot, per 100.....	...	.75
3½	inch Tree, iron wired....	2.20	1.70
3½	inch Tree Copper Wire..	2.30	1.80
8	inch Garden, per 1,000...	6.00	...
10	inch Garden, per 1,000...	7.20	...
12	inch Garden, per 1,000...	10.00	...

Prices, per 100—3½ to 6 in., 35c; 8 in., $1.00; 10 in., $1.25; 12 in., $1.75.

HARDWOOD FAN TRELLIS

Very durable and artistically made; will not scorch the most tender plant, and is far superior to any metal trellis.

30 in. x 13 in.	$ .60	6 ft. x 38 in.	$2.10
36 in. x 16 in.	.95	7 ft. x 42 in.	2.50
4 ft. x 27 in.	1.50	8 ft. x 46 in.	2.95
5 ft. x 32 in.	1.80	10 ft. x 72 in.	3.80

FLOWER POTS

We carry a complete line of Regular Pots, Azalea Pots, Bulb Pans and Saucers in stock and quote as follows:

Size	Each	Dozen	100	1,000	Saucer Each
2 in..	$ .02	$ .15	$1.00	$8.45	..
2½ in..	.03	.20	1.40	11.25	..
3 in..	.03	.25	1.75	14.65	..
4 in..	.05	.45	2.70	22.50	$ .03
5 in..	.07	.70	4.85	....	.05
6 in..	.10	1.00	7.25	....	.06
7 in..	.15	1.50	12.00	....	.08
8 in..	.25	2.50	16.75	....	.11
9 in..	.35	3.50	24.00	....	.15
10 in..	.45	4.50	32.00	....	.18
11 in..	.65	6.50	50.00	....	.22
12 in..	.75	7.50	64.00	....	.25

NEPONSET FLOWER POTS

Made of waterproof paper, extensively used for starting seeds and seedlings in frames and hot houses.

	Doz.	100	1,000
2¼ in....	$ .08	$ .50	$3.80
2½ in....	.10	.60	4.10
3 in....	.15	.70	5.10
3½ in....	.20	.85	6.60
4 in....	.25	1.10	8.00
5 in....	.30	1.50	10.50

CEDAR PLANT TUBS

(Richmond Style)

Made of Selected Virginia White Cedar, bound with electric welded hoops, painted green.

No.	Inside Top Dia.	Inside Bot. Dia.	Inside Depth	Price
5	10	7½	9	$ .60
7	12	9	11	.90
9	14	11	13	1.25
11	16	12½	15	1.60
13	18	14½	17	2.25

PLANT BANDS

The simplest way to handle plants for transplanting is to grow them in our Ready-to-Use Plant Bands, because they are ready to use and no time is lost in setting them up.

Size	Depth	Per 5,000	Per 1,000	Per 250
2x2 in.	2½ in.	$10.80	$2.40	$ .75
3x3 in.	3 in.	18.45	4.10	1.25

BAMBOO PLANT STAKES

3 ft. Light	$ .65 per 100	$5.00 per 1,000
5 ft. Heavy	.45 per doz.	3.00 per 100
6 ft. Heavy	.55 per doz.	3.75 per 100

PERFECTO FLOWER BOX

The Perfecto Flower Box is recognized by scientific gardeners and florists as the correct idea in construction for growing house plants and porch plants. The problem is solved by means of the patented self-irrigating and air-circulating system.

The Perfecto is an ornament in good taste for any home and is constructed with this purpose in view. The finish is enamel, in either of three colors—Green, Old Ivory or Red. They measure 6 inches deep and 7 inches wide.

20 in.	26 in.	32 in.	38 in.	44 in.
$1.00	$1.25	$1.50	$2.00	$2.50

GALVANIZED HARD STEEL WIRE PLANT STAKES

Very durable, neat and strong, and extensively used for carnation and rose beds. No. 8 gauge.

Height	Doz.	100	1,000
3 ft.....	$ .20	$1.20	$10.00
3½ ft.....	.25	1.35	11.50
4 ft.....	.30	1.50	13.00
5 ft.....	.35	1.85	16.50

National Eezy Wear Garden Gloves

Here's a new and increasingly popular type of glove—for **men** and **women**—specially designed for garden wear. Just the thing you've been looking for.

All-Leather DIRT-PROOF
SOFT AS KID Easy to Wear

Sizes: Small, Medium, Large for Women; Medium and Large for Men, 75c. pr.; 2 prs. $1.40 postpaid.

MANURE FORKS (Meadow Monarch)

13-inch tines, 4½ foot handle, strap ferrule. 4 tines, $1.20; 5 tines, $1.35; 6 tines, $1.50. Malleable D-Handles same prices as above.

HAY FORKS (Meadow Monarch)

Three 12-inch tines, 6-foot straight handle, Strap Ferrule. Price, $1.30.

SPADING FORKS

Farm King—Heavy, five 11-inch tines, D-Handle, Strap Ferrule. Price, $1.90.

Jumbo—Four 11-inch tines, D-Handle, Strap Ferrule. Price, $1.60.

Boys' Spading Forks—Four 7-inch tines, D-Handle, Plain Ferrule. Price, 85c.

ENSILAGE FORKS (Continental)

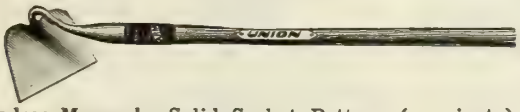
Ten 16-inch Oval tines, 2½-foot D-Handle, Strap Ferrule. Price, $2.65.

POTATO HOOKS (Continental)

Round Steel Tines, 4½-foot Handles.

Four 7-inch tines	Price, $ .90
Five 7-inch tines	Price, 1.10
Six 7 inch tines	Price, 1.20

GARDEN HOES



Meadow Monarch—Solid Socket Pattern (no rivets), 6 to 7½-inch Blades, 4-foot Handle. Price, 90c.

Ladies' Hoe, Meadow Monarch—5-inch Blade, 4-foot Handle. Price, 70c.

WARREN HOES

Continental—Heart Shaped, large size 7½-inch. Price, $1.15.

WEEDING HOES

Acme—(Pressed Steel), Double Prong, 4½-inch Blade, 4 1/3 foot handle. Price, 95c.

Forged Steel, Double Prong, 3⅝-inch Blade, 4 1/3-foot Handle, 8¼-inch Head. Price, 95c.

FLORAL SETS

Consisting of Shovel, Hoe and Rake. Price per set, $1.70.

STEEL GARDEN RAKES

Meadow Monarch—Round Bow Curved Teeth, 5½-foot Handle. Price, 12 teeth, 85c; 14 teeth, 90c; 16 teeth, $1.10.

Meadow Monarch—Level Head Curved Teeth, 5½-foot Handle. Price, 12 teeth, 85c; 14 teeth, 90c; 16 teeth, 95c.

BROOM RAKES

Continental—22 14-inch Flat Teeth, 4-foot Handle, Flexible Spring Steel. Price, 75c.

WIRE LAWN RAKES

Meadow Monarch—24 2-inch Teeth, 5-foot Handle, No. 9 Steel Wire. Price, 75c.

WOOD LAWN RAKE

3 Wire Brace, 24 teeth, 70c; 1 Wire Brace, 20 teeth, 55c.

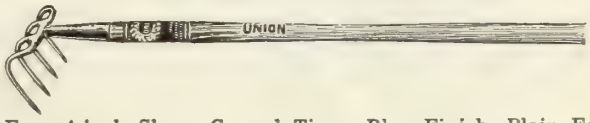
WOOD HAY RAKE.

2 Wire, 10 teeth, 45c.

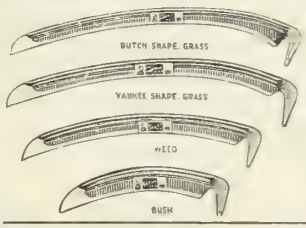
TURF EDGERS

Socket Pattern, 9-inch 1/3 Polished Blade, Green Finish, 4-foot Handle. Price, $1.00.

SPEEDY CULTIVATORS



Four 4-inch Sharp Curved Tines, Blue Finish, Plain Ferrules; 4 1/3-foot Handle. Price, 80c.



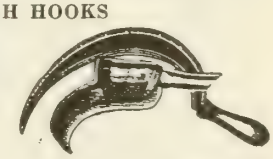
SCYTHES	Price
Best American Grass	$1.50
Bush or Brier Scythes	1.50
English T. Waldron	2.50
Little Giant Dutchman	1.85

IMPORTED GERMAN SNATH $2.25 Each.

SNATH or SCYTHE HANDLES

Patented Fasteners	Price, 1.50
Bush Snath, heavy	Price, 1.50

GRASS AND BRUSH HOOKS



	Price
American Grass Hook	$ .60
Draw Cut Grass Hook	.75
German Grass Hook	.50
Best English Grass Hook	.90

BRUSH HOOKS

For shrubbery and underbrush.

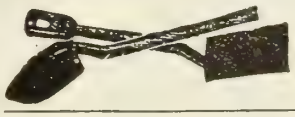
Tempered Steel	Price, $1.75
Imported Solid Socket	Price, 1.25
Imported Solid Socket, with Cutter	Price, 1.40

LIGHTNING HAY KNIFE

Crucible Steel ..... Price, $1.75

CHAMPION POTATO SCOOP

Heavy wire potato and vegetable scoop, D Handle $2.00



SHOVELS

Round or Square Point. Long or D-Handles.

No. 2	$1.00	No. 3	$1.25
No. 4	1.25	No. 6	1.35

SPADES

Favorite, solid back D Handle, $1.00.

Nursery, extra heavy D-Handle, full strap. Price, $4.25.

POST-HOLE DIGGERS

Baldwin Brand ..... Price, $1.75

EARTH AUGER

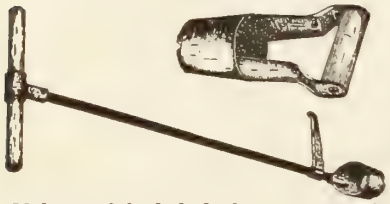
	Price
Bores holes 8 to 14 inches in diameter, 3½ feet deep	$6.00
Bores holes 8 to 16 inches in diameter, ½ foot deep	6.75

DIBBLES

Decidedly the best tool for transferring plants.

All steel, D-handle	$ .80
All steel, bent handle	.60
Wood bent handle, steel point	.65
Steel points for same	.35

HOLE-IN-ONE TOOLS



Makes a 3-inch hole in one operation, cuts into and removes soil leaving a perfectly flat bottomed hole. 5 inch D handle, 50c. 32 inch handle with adjustable foot rest and depth regulator, $3.00.

HAND GARDEN FORKS

No. 2. 11 inches long, hardwood handle, 3 tines, Japanned. Price, 40c.

No. 3. 10 inches long, hardwood handle, 4 tines, Japanned. Price, 30c.

ASPARAGUS KNIFE

Made of solid steel; see the cutting point. Price, 40c.

ASPARAGUS BUNCHER $4.00

GARDEN TROWELS

	Each
6-in. Steel Blade, Malleable Shank	$ .15
6-in. Extra Strong, Hollow Back	.35
6-in. Solid Steel, Bronzed and Polished	.50
6-in. American Solid Steel, Hollow Back, finely finished	.50
5-in. Solid Steel, Forged Shank	.60
6-in. Florists' favorite, solid steel forged, Shank and Blade one piece	.75

TRANSPLANTING TROWELS

No. 2, 5-inch blade	$ .20
No. 1, 8-inch blade	.25

EVERLAST ALL STEEL GARDEN TOOLS

The one piece construction and quality of steel make them practically unbreakable. Trowel, transplanting trowel, weeder, and cultivator, made of heavy steel, enameled. Each tool guaranteed. **Set of 4 pieces, 75c.**

THERMOMETERS

	Price
8-inch, Tin Japanned	$ .50
10-inch, Hardwood Cabinet	.60
12-inch, Tin, Japanned, Hot-Water Reg.	1.00
Mushroom Bed and Hot Bed, Brass Point	2.00

AMERICAN EDGING KNIVES

All Steel. Price, $1.00.

PRUNING SAW

18-inch	$1.25
20-inch	1.35

NORCROSS CULTIVATOR

The Norcross is an adjustable garden cultivator of 5 blades. A very handy garden tool. By removing the center tooth you can straddle the rows. The teeth can be made to set close or wide apart. Can be detached from handle and attached to any wheel hoe.

Price, $1.00.

MIDGET NORCROSS

3-prong, short handle ..... Price, 50c

3-prong, long handle ..... Price, 80c

MAGIC WEEDER

A perfect and efficient tool, made of best tempered steel and furnished with 6 and 18-inch handle. **Price, 15c and 20c.**

GRAFTING WAX

Trowbridge Brand.

Price, ¼ lb., 15c; lb., 50c.

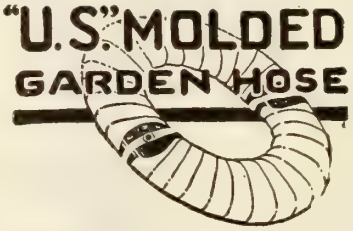
FRUIT PICKER

Made of galvanized hard-steel wire, shaped so as to imitate the human hand. Without pole. **Price, 50c.**

DOO KLIPS

These tools are very handy because of the vertical movement of the handles.

Grass Shear (Standard)	$1.50
Grass Shear (Long Handle)	2.50
Pruner	1.25
Snip-Itt (illustrated)	1.00



RAINBOW BRAND—Double braid, finest quality; 5/8 inch. 10c ft.; 50 ft. lengths with couplings, $4.50 each.

COMPETITION BRAND—Single braid, 5/8 inch. 25 ft. lengths, $1.75 each.

NEPTUNE BRAND—5/8 inch corrugated, 50 ft. length with couplings, $3.75

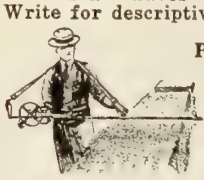
LOPPING SHEARS

No. 6 Forged blade and ferrule	$1.40
No. 4 Handy Andy (9-in. handles)	1.45
No. 3 American Draw Cut (22-in. handles)	2.40

"LITTLE WONDER" HEDGE TRIMMER

New Model N, Electric

Makes cut 36 inches wide. ONE MAN Machine. Will easily trim 300 to 500 lineal feet per hour. Cuts costs to a minimum. Saves untold hard labor. Write for descriptive circular.



Prices	Hand Driven	Electric
30-in.	$25.00	$103.00
40-in.	27.50	106.50
60-in.	35.00	114.00
25-in.	....	65.00

TREE PRUNER

8 ft $2.00
10 ft 2.20
12 ft 2.40

LITTLE GIANT PRUNING HOOKS

Without pole, $2.00 each

HANGING BASKETS

Enameled green
10 in 20c
12 in 25c

HINGED HANGING BRACKETS

For same 15c each

HEDGE SHEARS

American Disston		English	
6 in.	$1.35	6 in.	$2.15
8 in.	1.75	8 in.	2.45
9 in.	1.90	9 in.	2.75
10 in.	2.00	10 in.	3.15
12 in.	2.50	12 in.	4.75

THE RODERICK MOLE TRAP

Self-setting by pressing down on lever. Very convenient feature, found on no other trap. Made from best spring steel, thoroughly galvanized. Simple and durable in its construction.

Price, 85c.

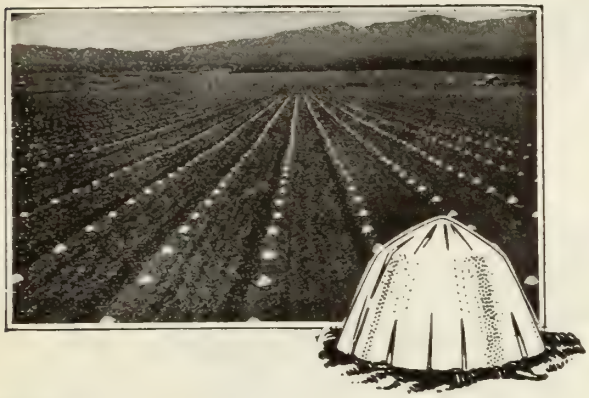
OUT-O'-SIGHT MOLE TRAP

This, while possessing all the good qualities of other traps, is especially adapted for setting under glass in hot beds. **Price, $1.25.**

PRUNING SHEARS

		Each
No. 0	Pexto—Wire Spring; 8 in.	$ .50
No. 140	Pexto—Rose Shear; 6 in.	.60
No. 37	Tempered blades, polished; Black handles; 9 in.	.75
No. 41	Best steel, full polish; 9 in.	1.25
No. 44	Nickel plated German Shear, best steel; 6 in.	1.35
No. 39	Same as No. 41 but with ratchet nut; 9 in.	1.50
No. 100	Pexto—French style; 8 in.	2.00
	Pexto—Extra heavy full polished; 9 in.	2.25

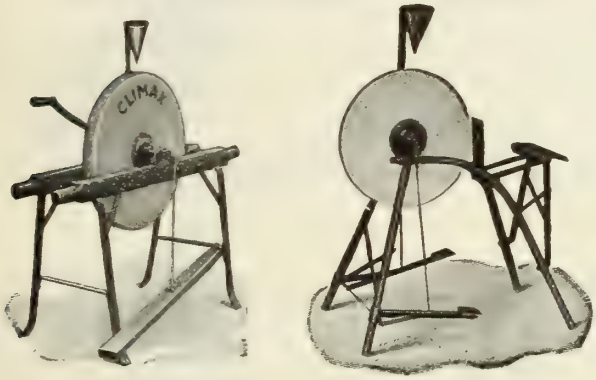
HOTKAPS



HOTKAPS can make many extra dollars for you this season by assuring you of earlier, bigger crops, and higher early-to-market prices. A patented wax paper cone which completely covers the plant and protects them from frost, rain, wind, ground-crusting and insects.

250 Hotkaps with Garden Set $3.65
1000 Hotkaps 10.00
Steel Hotkap Setter and Tamper 2.25

MOUNTED GRINDSTONES



CLIMAX. Frame is a combination of wood and steel, well finished.

No. 3 ..... $7.50 Victor $8.25

KING. The frame is constructed of tubular steel, very rigid, ball bearing, adjustable seat, and equipped with treadles. Stone is 20-22 inches in diameter by 2-inch face... $8.75

CYCLE. Of angular steel, well braced, with sliding seat, ball-bearing bicycle treadles. Stone is 20-22 inches in diameter by 2-inch face of the best Berea grit $8.00

Loose Grindstones, 5c per pound. (40 to 200-lb. stones.)

WHEEL BARROWS

Buch's No. 1

Substantially made of seasoned wood, firmly bolted and braced.

Buch's No. 1. Size of body 30 inches long, 24 inches wide in front and 25 inches in back. Side-boards 12 inches high. $8.25.

Buch's No. 2. Size of body 28 inches long and 20 to 24 inches wide. Side-boards 12 inches high. $7.00.

Buch's No. 3. 26 inches long, 19 to 22 inches wide. Side-boards 12 inches high. $6.85.

No. 4. Boys' Barrow, body 22 inches long, 15 by 18 inches wide, side-boards 9 inches high. $5.35.

No. 67. Greenhouse size. $8.65.

No. 6B. Steel wheel, wooden body. $4.45.

No. 6½. Wooden Frame, steel wheel. Bed length 27 inches, width 22 inch and 17 inch; 20-inch wheel. $4.85.

No. 8 Canal Barrow. With steel spoke wheel, full-sized bent tray, planed, cleated and strapped together, well finished. $5.10.

No. 8

No. 21. Light steel tray cement and dirt barrow. $4.50.

No. 20. Steel Pan, 4 cubic feet Capacity. Wooden Handles. $4.00.

No. 21

No. 17-B. Size of tray 32 by 27 inches; capacity 4 cubic feet. $6.65.

No. 17-B

No. 37. 3 cubic feet Capacity; weight 70 pounds. Handles shaped from 1-inch wrought pipe. $8.00.

No. 25. All steel, tubular handles, riveted tray, high front to prevent spilling. Specially built for heavy work and rough usage. $7.00.

No. 37

No. 5. Steel Pan, 5 cubic feet Capacity. Tubular Steel Handles. $5.75.

Save Hours of Labor with These Machines.

NEW FELINS VEGETABLE TYING MACHINE

$70.00

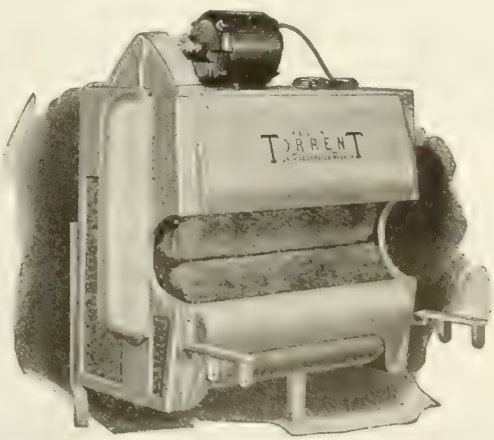
BUNCH VEGETABLE WASHER

Washes 200 Dozen Bunches An Hour. Increase Your Profits.

$140.00

ROOT WASHER

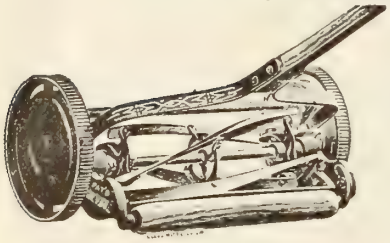
$150.00



QUALITY LAWN MOWERS

All reliable, successful brands on which repairs are always easily obtained.

STERLING BALL BEARING

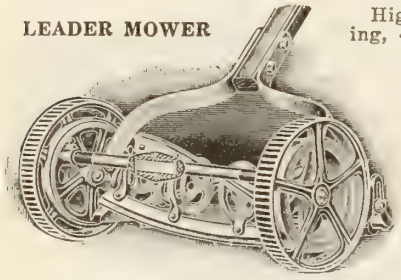


Light running; practical design.
4 blades; 8 in. wheels
12 in.....$4.50
14 in..... 4.75
16 in..... 5.00

TERRACE SPECIAL AND PLAIN STERLING

3 blades; 8 in. wheels
12 in.....$4.10
14 in..... 4.35
16 in..... 4.60

LEADER MOWER



High wheels, Ball Bearing, 4 blades. Very light running. Wheels 9 inches high; reel 6 inches in diameter; all latest improvements; noiseless action; keen cutting; self-sharpening; high speed.

12 in.....$4.35
14 in..... 4.50
16 in..... 4.85
18 in..... 5.25

KING HIGH GRASS MOWERS—BALL BEARING

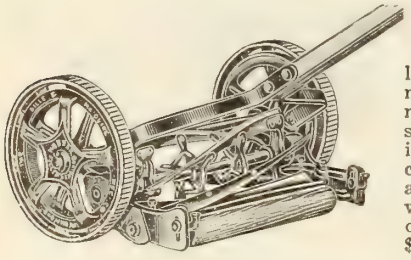
Driving wheels 10 inches high; 6-inch ball-bearing revolving cutter; five crucible steel blades, hardened and tempered in oil.

14-inch cut $12.00 16-inch cut $12.75 18-inch cut $13.25

HIGH SPEED—BALL BEARING MOWER

A special high grade mower, cuts the thickest grass fine and close. Patented adjustment for center of stationary knife; drive wheels 11 inches in diameter; 5 blades; 6 inch ball bearing revolving cutter; knives crucible cast steel, hardened and tempered in oil; self sharpening.

14 inch .....$7.50 16 inch $8.25



NOBRAKO

The unbreakable lawn mower made of malleable iron, commonly known as all-steel, 6 inch ball bearing, 5 blade revolving cutter; 10½ inch Hyatt roller bearing wheels. Silent in operation. **16 inch, $10.50; 18 inch, $11.00.**

PHILADELPHIA STYLE "B-B" MOWER

A very sturdy yet easily operated Philadelphia-made ball bearing mower, having 9-inch drive wheels, revolving cutter, and 4 crucible steel blades. **14-inch, $8.50.**

With 10-inch diameter Open Wheels. **16-inch, $10.50.**

REVOLVING SPRINKLER

These sprinklers are compactly and strongly made with phosphor-bronze bearing.

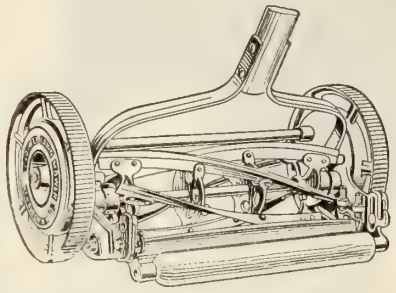
Eureka Sprinkler, 12 inches high, Price, $1.85.

Newport Sprinkler, 24 inches high, Price, $3.25.

FOUNTAIN SPRINKLER

Made of Heavy Brass

Easily moved over the lawn without turning off the water. The mist-like spray is a veritable "thing of beauty." **Price, 75c.**

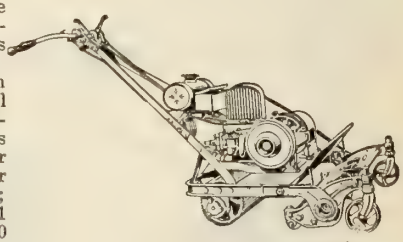


AMBASSADOR

High grade, ball bearing, five blades, 10 inch wheel. Light and easy to handle. **14 in., $12.00; 16 in., $12.50; 18 in., $13.00.**

COLDWELL CUB POWER LAWN MOWER

Made by one of the oldest and most reliable manufacturers in the country.



Five blades, 21 inch cut, ball bearing, full width drive roller, capacity 2 to 3 acres per day. Enclosed four cycle motor, water cooled; three speeds; fuel consumption 1 gallon gasoline for 10 hours cutting. **Price $195.00. Grass Box Attachment, $10.00.**

GRASS COLLECTOR

Made of best quality duck with galvanized iron bottom, easily attached. Collectors, **No. 1 for 12-14-16 inch, 90c; No. 2 for 18 inch, 1.00.**

LAWN ROLLERS

These rollers represent all the latest and up-to-date improvements; they are fitted with hardened steel roller bearings, which reduces the draft by 40 per cent; the counter-balance attached on the outside of the drum induces the handle to stand in an upright position. The outer edges of the drum are well rounded to prevent cutting.

No. 605 has plain bearings and no scraper.

WATER BALLAST LAWN ROLLER

No. 601—14x24,	**Empty 70 lbs.;**	**Filled 175 lbs..**	**Price, $11.75**
No. 602—18x24,	**Empty 85 lbs.;**	**Filled 265 lbs..**	**Price, 13.75**
No. 603—24x24,	**Empty 110 lbs.;**	**Filled 420 lbs..**	**Price, 16.00**
No. 605—14x24.	**Empty 68 lbs.;**	**Filled 175 lbs..**	**Price, 9.50**

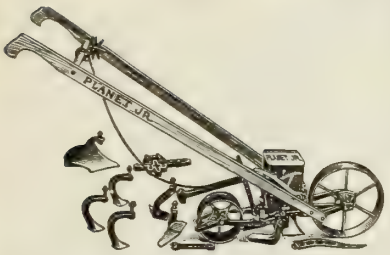
Cast Drum Rollers	Diameter Face	Total Length	Weight Pounds	Price
No. 504—2 section	20	20	250	$19.00
No. 507—2 section	20	24	300	24.75
No. 509—2 section	24	20	400	32.25

80 Page Catalog

Planet Jr. Garden Tools

Get Your Copy

No. 4



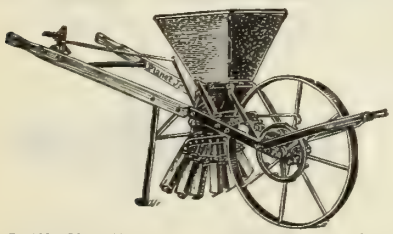
The No. 4 is a combination of the most useful tools for the home garden. Plants almost all vegetable seeds in continuous rows or in hills 4, 6, 8, 12 or 24 inches apart. A plow adjustable for depth opens a straight, narrow furrow, the seeds are dropped in it, are covered and the soil firmed and the next row marked out, all in the same operation. Can be converted into a Single Wheel Hoe by changing one bolt. Cultivating equipment includes the most useful attachments—hoes for weeding and shallow cultivation, cultivator teeth for deeper and general cultivation, and the plow for furrowing and ridging. **Price $16.75.**

No. 4-D, a Seeder only, Price $13.50.

No. 300 DRILL SEEDER

A plate or disc seeder for all seeds from the smallest up to and including peas, beans and corn. Growers of peas and beans will appreciate this seeder as it does not break the seed and sows with great regularity. Only three plates each with thirteen holes, making ample adjustment for various seed. Hopper holds four quarts and is removable which makes easy filling and emptying. Net weight 36 pounds. **Price, $18.75.**

No. 220 FERTILIZER DISTRIBUTOR



Will distribute 100 to 2,000 pounds of commercial fertilizer to the acre. Six adjustable spouts spread from 4 to 30 inches. Equipment includes plates for closing up four spouts or three spouts on left side. Hopper weight placed over the wheel making lighter load and easier pushing. Feed can be opened and closed without stopping. Positive agitation. Price, $26.00.

No. 11 WHEEL HOE

Equipment is complete including one pair 6-inch and one pair 4½-inch hoes for weeding and shallow cultivation, four cultivator teeth for deeper and general cultivation, one pair of plows for plowing, covering and ridging, two 3-tooth and two 5-tooth rakes for fine close cultivation and a pair of leaf lifters which lifts the leaves or vines out of the way when the plants are more fully grown. Frame is adjustable for rows of different widths. **Price, $13.00.**

No. 12 WHEEL HOE

Same as No. 11, but less the rakes and 4½-inch hoes. **Price, $10.25.**

No. 13 WHEEL HOE

Same as No. 12, but with 6-inch hoes only. **Price, $7.60.**

No. 16 WHEEL HOE

Equipment very complete, including one pair of 6-inch hoes for weeding and shallow cultivation, three cultivator teeth for general and deeper cultivation, one plow with landside for hilling, ridging and plowing. One three-tooth and one five-tooth rake for fine close cultivation and one leaf lifter, which is useful for protecting overhanging leaves and vines. An ideal machine for the family garden. **Price, $8.50.**

No. 17 WHEEL HOE

Is of the same construction as No. 16, omitting the two rakes. **Price, $7.35.**

No. 17½ SINGLE WHEEL HOE

Equipment, one pair of 6-inch hoes, three steel cultivator teeth, one leaf lifter. **Price, $6.40.**

No. 18 WHEEL HOE

Frame and wheel as No. 16, but has for equipment one pair hoes only. **Price, $5.50.**

No. 19 GARDEN PLOW

An inexpensive, yet sturdy, garden plow and cultivator for the home garden. Attachments consist of plow, cultivator tooth, sweep and a five-prong cultivating attachment for fine work. Handles are adjustable for height. **Price, $4.75.**

No. 90-D 12-TOOTH HARROW

The fruit, berry and vegetable grower's favorite. Does fine, thorough cultivation. Expands to 32 inches; contracts to 12 inches. **Price, $10.00.**

No. 119 GARDEN PLOW

A sturdy and inexpensive garden plow and cultivator. For those liking the high wheel this tool is the favorite. Equipment includes a large plow, a scuffle blade and three cultivator teeth. Due to the high center of gravity this tool pushes very easily. **Price, $3.75.**

No. 8 HORSE HOE

Made almost entirely of steel, well braced and adaptable to any conditions. Frame of stiff steel, extra long and high, closes to 10 inches and opens to 25. Cultivator teeth are of high carbon beveled steel, thereby making them self-sharpening and the point retains its shape, greatly prolonging the life of the steel. Patent hillers are reversible for hoeing or hilling. Can be run close to the plants without endangering the roots. Handles adjustable up, down and sidewise. Price, $14.70.

No. 9-D HORSE HOE and CULTIVATOR

Same as the No. 8, less the depth regulator and steel lever wheel. Strong and light. Does perfect work. **Price, $11.00.**

No. 9-D PLAIN 5-TOOTH CULTIVATOR

Equipment: Four 3x8-inch cultivator steels; one 4x8-inch cultivator steel; lever expander. Hollow steel standards and steel draft hook. Simple, practical—always ready for work. **Price, $9.75.**

No. 4-D PLAIN CULTIVATOR

Same as the No. 9-D, but does not include lever expander. Patent beveled steel teeth. An every-day, all-day tool. **Price, $7.70.**

No. 101-D PLAIN CULTIVATOR

Equipment: Five 3x8-inch cultivator steels; lever expander. Lever is all steel; simplified and improved; works very easily. Just the tool for sandy soils or light cultivating. **Price, $8.30.**

No. 100-D PLAIN CULTIVATOR

Same as the No. 101-D, less the lever expander. The right tool for sandy soils in this section. **Price, $6.75.**

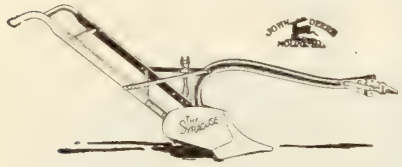
No. 92-D PLAIN 12-TOOTH HARROW No Wheel

A light, but effective cultivator for fine work—at a moderate price. **Price, $8.50.**

OLIVER PLOWS AND REPAIRS

	Plows	Mould-boards	Land-sides	Solid Shares
A	$9.00	$1.45	$0.50	$0.27
B	10.00	1.85	.65	.35
10	13.25	2.05	.75	.40
13	15.00	2.70	.85	.50
19	16.25	2.95	.90	.55
20	17.50	3.10	.95	.60
40	20.00	3.40	1.00	.65

SYRACUSE CHILLED PLOWS



John Deere Syracuse Plows are the result of forty years study and experience in plow manufacture and "Quality" always has been the motto of the Syracuse Plow Company.

The Company has made a special study for years of shape and the assembly of different materials in the same plow with the purpose of fitting properly a particular plow for a particular section.

Syracuse plows have proved their worth through years of use. They are scientifically designed, built of the best material obtainable and are equipped with attachments which will permit of a fine, accurate and reliable adjustment for governing the plow.

Prices quoted are subject to 5% cash discount. Wheel and jointer extra.

One-Horse Plows

No. 50. Right, wood beam, light, one horse, making furrow 2 to 5 inches deep and 8 to 10 inches wide. $9.25.

No. 52. Right, wood beam, medium, one horse, making furrow 3 to 5½ inches deep and 9 to 11 inches wide. $13.25.

No. 53. Right, wood beam, heavy, one horse or light two horse, making furrow 3 to 6 inches deep and 9 to 12 inches wide. $15.00.

No. 1464. Right, steel beam, $15.00.

No. 1465. Right, steel beam, $12.75.

Two-Horse Plows—Wood Beam

No. 603. Right, wood beam, light two horse, making furrow 4½ to 6½ inches deep and 10 to 12 inches wide. $16.50.

No. 602 Right, and No. 502 Left. Wood beam, medium, two horse, making furrow 5 to 7 inches deep and 11 to 14 inches wide. $19.00.

No. 601 Right, and No. 501 Left. Wood beam, heavy, two horse or light three horse, making furrow 5½ to 8 inches deep and 12 to 16 inches wide. $20.00.

Two-Horse Plows—Steel Beam

No. 1462 Right and No. 1362 Left. Steel beam, similar to No. 602 wood beam plow. $19.00.

No. 1461 Right and No. 1361 Left. Steel beam, making furrow 5 to 8 inches deep and 12 to 16 inches wide. $20.00.

SYRACUSE REPAIRS

	Mould-boards	Land-sides	Solid Shares
50	$1.85	$0.58	$0.28
53	2.75	.86	.42
603	2.80	1.16	.52
602	4.15	1.25	.52
601	4.55	1.25	.56
1462	3.10	.93	.52
1461	3.40	.93	.52

SHOVEL PLOWS

Steel beam, single shovel. **Price, $4.00.**

Steel beam, double shovel. **Price, $4.50.**

Steel beam, triple shovel. **Price, $6.25.**

NEW IMPROVED

CENTAUR TRACTOR

Six horse power, plows a full 12 inch furrow while the operator rides. It also cultivates, harrows, and supplies an all-purpose power unit for the farm.

Tractor	$548.00
Standard Oliver Plow Attachment	23.50
10-16-inch Disc Harrow	38.00

F.O.B. Factory—Let us Send Literature.

SINGLE AND DOUBLE TREES

Single, 2 hooks, 26 in. 55c; 28 in. 60c.
Single, 3 hooks, 26 in. 60c; 28 in. 65c.
Double, 36 inch $1.25; 40 inch $1.35.

IRON AGE CULTIVATORS

Plain 5-tooth cultivator; expands 9 to 24 inches. **Price, $6.45. Lever Expander, $1.85 extra.**

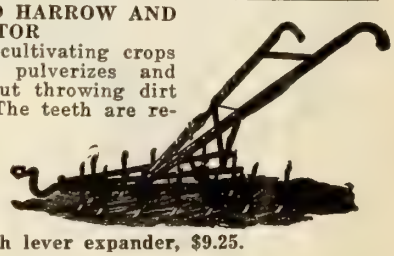
I. A. Cultivator and horse hoe combined, as illustrated. **Price, $12.00.**

WHITE'S PLAIN 5-TOOTH BENT FRAME CULTIVATOR

$5.00.

IRON AGE COMBINED HARROW AND CULTIVATOR

A splendid tool for cultivating crops in rows; thoroughly pulverizes and loosens the soil without throwing dirt on the small plants. The teeth are reversible and can be changed in 4 different positions. Expands 11 inches to 36 inches. **Price as shown in illustration, $8.00.**



Price, with lever expander, $9.25.

DRAG SCOOPS

No. 1.	K. & J.	$9.50	No. 3.	K. & J.	7.50
No. 2.	K. & J.	8.50	No. 1.	Maumee	$8.00
			No. 2.	Maumee	7.00

STEEL LAND ROLLERS

Drums of Heavy Tank Steel. Angle Steel Tops—Angles 3x3x5/16 inches—Extra Strong. Axles—1⅝-inch Round Steel. Closed Pressed Steel Heads. Hardwood Boxings—Acknowledged by all to be the best. Tractor or Horse Hitch.

No. 102½—8 ft., 2 sec., 26 in. diameter; 550 lbs.....$40.00
No. 103½—8 ft., 3 sec., 26 in. diameter; 600 lbs..... 42.00
No. 105½—8 ft., 2 sec., 24 in. diameter; 510 lbs..... 36.00
No. 106½—8 ft., 3 sec., 24 in. diameter; 535 lbs..... 40.00
No. 120½—9 ft., 3 sec., 24 in. diameter; 585 lbs..... 44.00
No. 118½—4 2/3 ft., 2 sec., 24 in. diameter; 370 lbs.... 34.00

Extra for Eveners, $2.75.

BUCH'S SOIL PULVERIZER

Simple in construction. Strong rigid frame. Angles—2½x3x5/16 inches with Heavy Cast Hangers, 1⅝-inch Axle. Inclosed Dust-Proof Wood Bearings with Hard Oil Cups.

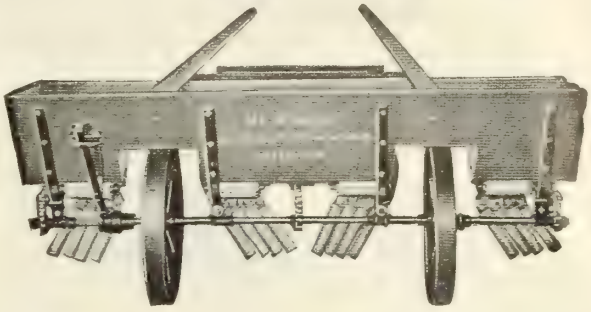
Solid one-piece Discs 4-inch face, 15-inch front, 12-inch rear. Pulverizer so constructed that Discs must alternate and impossible to get out of alignment. End Discs closed to keep out stones and dirt.

With our Trailer Arm, both front and rear Gang work independent. No division of weight, both front and rear gang pulverizing the soil under all conditions in uneven ground. This feature makes our pulverizer light in draft.

No.	Length	Rolling Capacity	Weight	Price
625	6 ft.	62 inch	800	$60.00
626	7 ft.	74 inch	900	64.50
627	8 ft.	84 inch	1000	70.50
628	9 ft.	98 inch	1100	79.00
630	11 ft.	122 inch	1350	97.50

Foretruck, $8.50; Eveners, $2.75; Tractor Hitch in addition to Pole and Seat, Extra $3.00.

McWHORTER FERTILIZER DISTRIBUTORS



McWhorter Fertilizer Distributors have been used for many years with great success and have features not to be found on any other fertilizer distributor. The McWhorter does not depend on gravity for feeding fertilizer, but positive belt force feed which can be adjusted to feed any amount required. The spouts are adjustable and can be set to feed the number of rows desired, or to broadcast. Each set of spouts can be adjusted to feed any amount of lime or fertilizer desired from a few pounds to over a ton per acre. The feed adjustment of each set of spouts is regulated independently. By moving a lever the entire machine can be shut off while going to or from the field. The hopper on the larger machines is so constructed that it sits down over the wheels. This patented feature brings the hopper very close to the ground, thereby eliminating waste of material on windy days, and making the loading much easier.

No. 21—Hand Fertilizing Distributor—Capacity 80 pounds; width 30 inches; weight 85 pounds. Has all McWhorter features; ideal for gardeners requiring a small distributor. **Price, $20.00.**

No. 12—Light-draft one-horse machine, excellent for both furrow work and top and side dressing growing crops, as it makes a fine and even distribution. Capacity 200 pounds, width 3 feet 2 inches, weight 145 pounds. **Price, $35.75.**

No. 11—Constructed on the same general lines as No. 12, but is much lower in price. It has only one feed belt and one set of spouts and will spread from 3 to 15 inches. Capacity 200 pounds, weight 136 pounds. **Price, $29.75.**

No. 34—One-horse machine, equipped with 16 Spouts. Will sow broadcast or in rows. Can be used for side dressing on both sides of two rows of growing crops or one side of four rows. Capacity 375 pounds, width 6½ feet, weight 260 pounds. **Price, $60.75.**

No. 44—One-horse machine similar to No. 34, but with wheels adjustable to any width row, a patented feature not found on any other machine. It will broadcast 7 feet wide or can be adjusted to fertilize three furrows 3 feet apart and two furrows up to 6 feet apart. Will side dress both sides of two rows of growing crops or one side of four rows. Capacity 400 pounds, width 7 feet, weight 266 pounds. **Price, $65.50.**

No. 13-C—One-horse machine intended for row work only. Has adjustable rubber spouts so that they can be set for any width row desired. Capacity 400 pounds, width 7 feet, weight 260 pounds. **Price, $59.50.**

No. 13-D—Similar to the 13-C, but has three wider belts with six adjustable rubber spouts to each belt, and can be used as a broadcaster as well as for rows. **Price, $64.25.**

ECONOMY LIME SOWERS

One Horse—Capacity 400 to 600 lbs. adjustable to sow 200 to 5000 lbs. per acre, 36 in. wheels, 3 inch tire. **5 ft., $39.00; 6 ft., $44.00; 7 ft., $45.00.**

Two Horse—Capacity 500 to 700 lbs. sows 200 to 5000 lbs. per acre, 36 inch wheels, 3 inch tire. **7 ft., $45.00; 8 ft., $48.00; 9 ft., $52.00.**

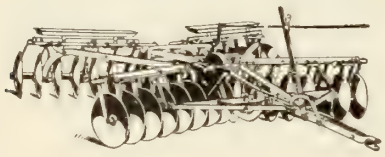
CASE QUALITY FARM MACHINERY

WRITE FOR SPECIAL FOLDER ON IMPLEMENTS YOU MAY NEED

TRACTOR PLOWS

B22BX-12 inch, 2 bottom $113.00
B24BX-14 inch, 2 bottom 113.00

POWER CONTROL DISK HARROWS



Double Cut

No. 76, 6 ft., 24 16-inch disks $115.50
No. 77, 7 ft., 28 16-inch disks 121.00

Single Cut

No. 78S, 8 ft., 16 16-inch disks $78.25

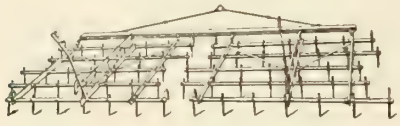
HORSE DRAWN DISK HARROWS

8 Disk, 16 inches, 4 feet, 2-horse evener and pole $45.60
10 Disk, 16 inches 48.80
12 Disk, 16 inches 54.70

TONGUE TRUCK FOR DEEP DISK HARROW

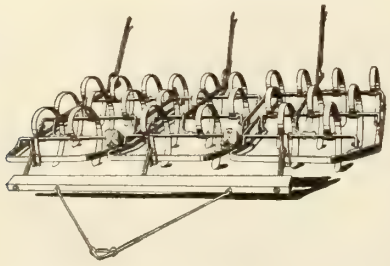
The Harrow Truck is a new device and enables the user to make a short turn and relieves the neck weight entirely. **$10.50.**

SPIKE TOOTH HARROWS



One horse, one section, 4 ft. cut, 25 tooth $8.00
Two horse, two sections, 8 ft. cut, 50 tooth 19.50
Two horse, two sections, 10 ft. cut, 60 tooth 21.25

SPRING TOOTH HARROWS

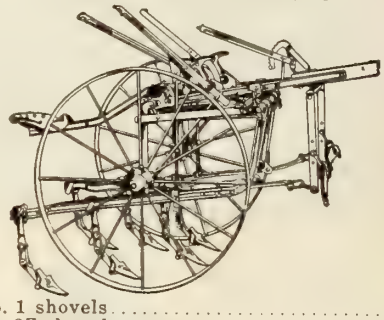


15 tooth, 2 sections, cuts 57 inches $22.65
17 tooth, 2 sections, cuts 64 inches 24.30
23 tooth, 3 sections, cuts 92 inches 34.15

MANURE SPREADERS

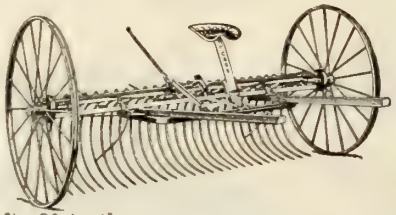
No. 3 with two horse evener $147.75

ONE ROW CULTIVATORS



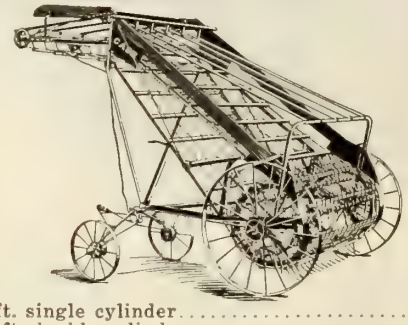
K-P24, 4 No. 1 shovels $53.25
K-P26, 6 No. 3Z shovels 56.50
K-P28, 8 No. 6 shovels 57.75

DUMP RAKES



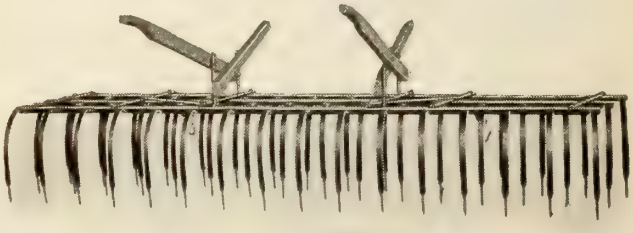
No. 820, 8 ft., 20 teeth $40.00
No. 1232, 12 ft., 32 teeth 52.50

CYLINDER HAY LOADERS



No. 16, 6 ft. single cylinder $115.00
No. 164, 6 ft. double cylinder 128.00

FLAT TOOTH WEEDERS



7½-foot Flat-Tooth Weeder $11.00
9-foot Flat-Tooth Weeder 13.00

MANNS' Quality-Bred CHICKS

Direct by Mail from Hatchery *or* At our Store after March 1st.

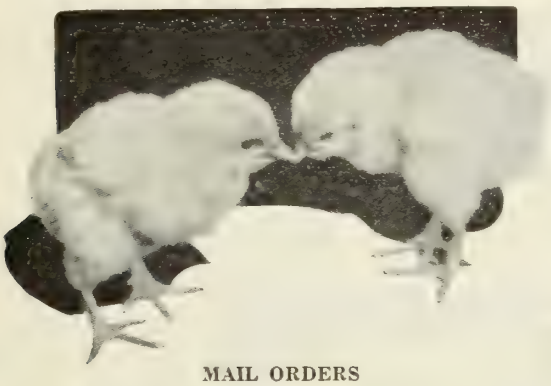
WE GUARANTEE DELIVERY

100% LIVE VIGOROUS CHICKS

With Profit Producing Characteristics Bred Into Them

They are hatched from eggs of free-range stock and inherit the physical perfection made possible only by an abundance of sunshine, fresh air and exercise.

Place your order with us for your season's supply of Day-Old Chicks, and you will have taken the first step toward a very profitable poultry year.



MAIL ORDERS

It is very important that you let us have your order as early as possible. Just as soon as you have read this page is the very best time. You can in this way specify a definite delivery date and we can serve you direct from our hatchery with strong chicks full of vitality. Should there be a decline in the market price of chicks, we will make an adjustment to equal the reduction.

Customers not having charge accounts with us are requested to send at least one-fourth of the price when placing orders; remittance for balance to reach us before shipment is made. No chicks sent C.O.D. No orders accepted for less than 25 chicks of any one variety.

DELIVERIES

Chicks are forwarded postpaid and brief instructions are sent with each order, suggesting best methods of care and feeding. Be prepared; see that hovers are in good condition, and have a ready supply of grit, charcoal and Buttermilk Starting Feed.

Please Note—Inspect chicks immediately upon arrival. If full count live chicks are not received, have postman sign a statement showing number dead, mail this to us and a satisfactory adjustment will be made.

Barred Plymouth Rock

BARRED PLYMOUTH ROCKS

First distinctively American breed and still the most popular of the all-purpose breeds. Barred Rocks are hardy and vigorous; excellent winter layers, and also preferred by experienced buyers of table fowl because of their abundant breast meat and bright yellow skin. Easy to raise and will thrive anywhere.

BUFF ORPINGTONS

A choice table bird—either as broiler or roaster. They develop rapidly, eight-week-old cockerels often weighing two pounds. They are excellent winter layers, stately in appearance, with long, round deep bodies, full breasts and broad backs.

JERSEY BLACK GIANTS

This new breed is becoming more popular every year. The plumage is lustrous greenish black, skin a rich yellow, finest table fowl, extremely large and heavy; excellent layers of large brown eggs.

White Leghorn

WHITE LEGHORNS

Most widely used breed of chickens, being the best of all for egg production.

The strain which we offer are bred to suit the requirements of commercial egg farms and every possible means has been employed in developing the stock for this purpose.

WHITE WYANDOTTES

One of the oldest and most popular of all American breeds, and ranking among the highest as egg producers. They have broad backs, deep round bodies, large red rose combs, yellow skin, and heavy close fitting plumage which enables them to withstand cold weather. Very striking in appearance; unsurpassed for table fowl.

White Wyandotte

Rhode Island Red

RHODE ISLAND RED

One of the best layers of the heavy breeds and an excellent table fowl. Somewhat rangier than Plymouth Rocks but the strongest competitor. A very profitable breed for the farmer. They are universally popular, however, with all poultrymen.

WHITE ROCKS

Differ from Barred Rocks only in their plumage. Quiet and easily confined. Popular because of their beauty, productiveness and value for market purposes; they dress easily having no dark pin feathers. Notable layers of large brown eggs.

PRICES

All Breeds (Except Leghorns and Jersey Giants)

	Jan.-Feb. March	April-May
25	$2.75	$2.50
100	9.50	8.50
1000	85.00	75.00
White Leghorns		
25	2.50	2.25
100	9.00	8.00
1000	80.00	70.00
Jersey Black Giants		
25	3.00	2.75
100	11.00	10.00
Special Heavy Mixed		
100	8.00	
1000	70.00	

Order Early—You will be given full benefit of any reduction in prices until shipping date.

FOR ECONOMY
Give Your Chicks The Best
FEED THEM
Conkeys
(The Original)

Conkeys Buttermilk Starting Feed with Y-O

Feed it to your chicks for the first six weeks. Contains every element necessary for baby chick life, health and development. Combine it with your Chick Grains. **5 lbs., 25c; 10 lbs., 45c; 25 lbs., 95c; 50 lbs., $1.75; 100 lbs., $3.25.**

Conkeys Gecco Growing Mash with Y-O

For your growing birds from six weeks to maturity. **10 lbs., 40c; 25 lbs., 85c; 50 lbs., $1.50; 100 lbs., $2.85.**

Conkeys Red Seal Growing Mash

With Cod Liver Oil, 100 lbs., $2.50.

Conkeys Gecco Egg Mash with Y-O

Feed this mash to make your hens lay every egg possible. Contains just the right amount of animal protein, minerals, vitamins, etc., for economical egg production. **10 lbs., 35c; 25 lbs., 80c; 50 lbs., $1.45; 100 lbs., $2.70.**

Conkeys Red Seal Laying Mash

100 lbs., $2.35.

Conkeys Gecco Chick Grains

100 lbs., $2.65.

Conkeys Gecco Growing Grains

Ties up splendidly with your Growing Mash. **100 lbs., $2.50.**

Conkeys Gecco Scratch Grains

100 lbs., $2.20.

Superior Scratch Grains

100 lbs., $2.00

Conkeys Y-O

1 lb., 50c; 2 lbs., 90c; 5 lbs., $1.60; 25 lbs., $5.45; 100 lbs., $16.50.

Clean, Wholesome Cracked Corn

100 lbs., $1.80.

Conkeys Balanced Rabbit Feed with Y-O

10 lbs., 40c; 25 lbs., 90c; 50 lbs., $1.65; 100 lbs., $3.15.

Conkeys Pigeon Feed-Breeders Without Corn

10 lbs., 40c; 25 lbs., 95c; 100 lbs., $3.60.

AVICOL — For White Diarrhea Stops Chicks Dying

Avicol is positively guaranteed for both prevention and treatment. Easy to give. Simply drop it in the drinking water. It will pay you to give Avicol to all your chicks this year, and keep them healthy and free from disease. **Prices: 50c and $1.00.**

"T. S. F." — Kills Chicken Lice Both Young and Old

This is the method endorsed by the U. S. Department of Agriculture for killing all poultry lice. It never fails to do the work. **Three sizes, 35c; 60c and $2.50.** (If by mail, add 10c for postage and packing.)

DON SUNG — Makes HENS LAY GUARANTEED

A wonderful tonic that acts directly on the egg-laying organs and is beneficial in every way. Makes chickens healthy, keeps them developing, and **gets the eggs. Prices: 50c, $1.00 and $5.00.**

The sure way to treat Colds, Roup and Canker. Used and endorsed by leading poultrymen everywhere. **Prices: 50c and $1.00.**

Group-Over

GERMOZONE
Keeps Chickens Healthy

Germozone three times a week in the drink destroys disease germs taken in with the food or water. Keeps the crop pure and sweet. Corrects and prevents diarrhea and bowel troubles, also recommended for Roup, Colds, Canker, Swelled Head, etc. **Prices: 12-oz. bottle, 75c; 32-oz. bottle, $1.50; ½ gal., $2.50; gal., $4.50.**

A Triple Combination Worm Medicine containing Kamala (for Tape Worms), Nicotine Sulphate (for Round Worms) and Pyrethrum (for Pin Worms), all in an Insoluble Capsule.

Being Insoluble it therefore carries through to the gizzard. In the gizzard it is ground up, pouring the correct dose in full strength directly into the intestines upon the worms.

	50	100	250	500	1000
Adult	$1.00	$1.75	$4.00	$7.00	$12.00
Pullet	.75	1.35	3.00	5.00	9.00
Chick	.50	.90	2.00	3.50	6.00

Vapo-Spray

Is the most effective medicine for colds, coughs, flu and pneumonia. With the first cough, treat the entire flock. **1 qt., 75c; ½ gal., $1.25; 1 gal., $2.00.**

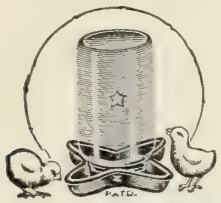
Leemulsion

An effective companion of Vapo-Spray is given in wet mash or soaked oats and acts exactly as a cough medicine does on humans. **12 oz., $1.00; 32 oz., $2.00; ½ gal., $3.50.**

Toxite

Disease Control Spray — Controls poultry Coccidiosis, Round Worms and Red Mites which are transmitted by contaminated litter. **$1.50 per gal.; 30 gallon drum, $1.30 gallon; 55 gallon drum, $1.20 gallon.**

STAR FOUNTAIN AND FEEDER



Made of a single piece of rust-resisting metal. No solder, no seams, no loose parts. Suitable for feed as well as water. Little chicks cannot drown. Fits any Mason jar in 1-Pint, 1-Quart and 2-Quart sizes.

(Glass jar not included)

No. 32—Each .....$ .10
No. 133—Tin plate, Each..... .10

ROUND CHICK FEEDERS

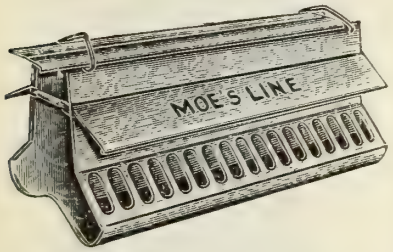
	Each
No. 11—Diam. 6 in., with 8 holes..	$ .10
No. 12—Diam. 8 in., with 12 holes.	.20

CHICK FEEDING TROUGHS

For chicks and growing stock. Galvanized iron. No seams, rivets or solder. Sliding top, easy to fill and keep clean.

No. 27—Length 10 inches, each....$ .20
No. 28—Length 20 inches, each.... .25

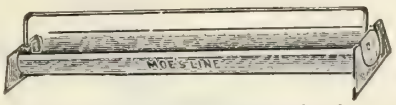
MOE'S BIG BOY FEEDERS



Can be placed on the ground or suspended by wire handles. Length 33 inches, with 34 feeder openings.

	Each
No. 160—Without the wide covers..	$3.50
No. 161—With wide adjustable covers (as shown).....	4.25

DIXIE CHICK FEEDERS



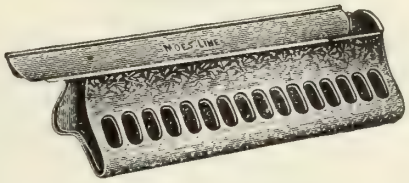
The deep, half-round troughs have a turned-in flange to prevent waste. Easy to fill and clean.

The wire top guard keeps the chicks out, and is adjustable, so it can be raised as the chicks grow in size.

Galvanized Steel

No. 460—Length 18 inches, each....$ .20
No. 462—Length 30 inches, each.... .30

LARGE CAPACITY FEEDERS



Fine Feeders for growing stock, ample capacity and great time and labor savers. Two sizes.

	Each
No. 140—Length 21 inches, holds 10 quarts, 32 feeder holes	$1.00
No. 141—Length 35 inches, holds 17 quarts, 54 feeder holes.....	1.50
No. 146—Hopper only, to fit No. 140 Feeder. Holds 5 quarts.....	.45
No. 148—Hopper only, to fit No. 141 Feeder. Holds 9 quarts.....	.65

MOE'S FIVE-FOOT FEEDER

No. 370—Length of feeder, 5 feet; height, 15 inches; width, 8 inches; depth, 5 inches; each.....$3.75

DOUBLE FEEDING TROUGHS

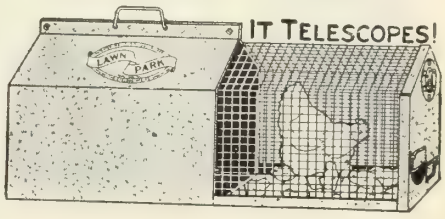
Made of the best quality galvanized steel, accurately stamped with dies. No sharp or rough edges to injure the chicks. Sliding top. Easy to fill and clean.

No. 58—12 inches, 18 holes, each...$ .25
No. 59—18 inches, 26 holes, each... .35
No. 60—24 inches, 36 holes, each... .45
No. 76—36 inches, 52 holes, eacn .60

STONEWARE FOUNTAIN

½ gal., 35c; 1 gal., 50c; 2 gal., 85c.
(Not mailable.)

"LAWN PARK" BROOD COOP



Size when extended, 18 inches wide, 19½ inches high, and 48 inches long. Not Mailable. Price, $3.50.

FOUNTAIN AND BROODER HEATER

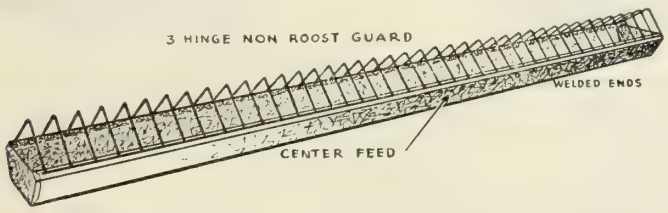
Can be used with all styles of fountains, and effectively prevents water from freezing. It is also an excellent heater for small brooders.

No. 10—Each $1.90

FLOAT FOUNTAINS

W-13, 10 qt., $1.50

W-14, 5 gals., $2.00



CHICK FEEDERS AND WATERERS

F2-G—Designed for day old chicks to eight weeks. 4 inches wide, 2 inches high, 28 inches long, weight 2 lbs. **35c each.**

F2—Tumble guard not only adjustable but tilts out of the way without removing for easy cleaning and filling. 4 inches wide, 1½ inches high, 24 inches long, weight 1½ lbs. **25c each.**

GROWING FEEDERS

Model	Length	Grid Spacing	Price
F-3	30 in.	1-5/8 in.	$0.85
F-4	48 in.	1-5/8 in.	1.25
F-4-D	48 in.	2-1/2 in.	1.45
F-4-H	48 in.	2-1/2 in.	1.25

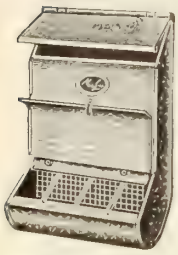
CHICK FOUNTAINS

W-2, 4 quarts, 50c

W-3, 8 quarts, 75c

W-4, 12 quarts, $1.00

DRY MASH HOPPERS



A strictly high quality hopper, properly designed. The curved bottom keeps the feed in easy reach, and the taper shape of the hopper prevents the feed from clogging. Height 19 inches.

	Each
No. 35—Width 8½ inches	$1.50
No. 36—Width 12 inches	1.70
No. 13—Width 18 inches	2.20
No. 37—Width 24 inches	2.60

OAT SPROUTER

The frame is of steel, well braced and neatly painted. Has six heavy galvanized iron pans. Five of the pans have perforated bottoms to secure the proper drainage, and the bottom pan is solid to hold the drippings. Packed knocked down, one in a crate. Shipping weight 25 pounds.

No. 110—Each . . . $5.00

ALUMINUM LEG BANDS

No. 130—Aluminum, with raised numbers.

Pkg. of	12	25	50	100	500	1,000
Price	$ .15	$ .25	$ .40	$ .65	$3.00	$5.50

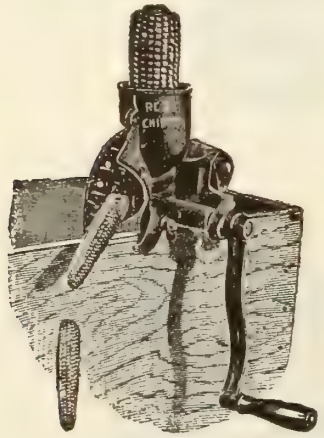
SPIRAL BANDS

Best quality. Made in six sizes and ten colors.

Sizes: Asiatic, American, Mediterranean, Bantam. **25 bands, 25c; 50 bands, 40c; 100 bands, 75c.**

Baby Chick and Pigeon. **25 bands, 20c; 50 bands, 35c; 100 bands, 50c.**

RED CHIEF HAND CORN SHELLER



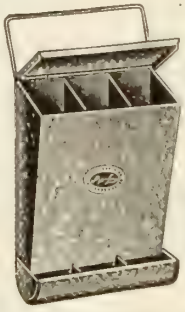
Clamps on barrel or box; has patented oval-shaped teeth, shelling the corn without cracking the grains. It shells very easily and throws out the cob every time. **Price, $2.00.**

AUTOMATIC FOUNTAIN

A perfect automatic valve and float, to regulate the flow of water to a drinking dish. The valve mechanism is entirely of brass, nickel finish, with nothing about it to rust or clog up. Positive in action.

	Each
No. 30—Automatic Valve and Float only	$1.00
No. 31—Water Pan only. Heavy galvanized iron.	.50
No. 31A—Automatic Valve and Pan complete	1.50

GRIT BOXES



Economical and practical for feeding grit, shells, etc.

Thoroughly well made, no solder used in their construction.

	Each
No. 45—2 Compartments	$ .40
No. 9—3 Compartments	.75
No. 90—4 Compartments	1.00

RED CHIEF RAPID GRINDING MILL

It is built on scientific lines and combines all the elements which make up the most satisfactory Hand-Power Mill for grinding small grain. The burrs are extra hardened and self-sharpening; they cut; do not smash.

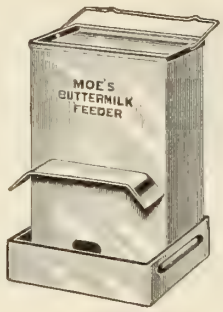
The only Mill that can be cleaned and adjusted in a moment's time without the use of a wrench.

No. 2—Is operated by a crank; chains or bolts to a box as desired. Has hooks on which to hang a bucket. Capacity 1 to 2 bushels per hour. **Price, $5.00.**

No. 5—Has a fly wheel which makes the Mill run steady. and requires the least possible power to turn it. It fastens by chains or bolts. Capacity 2 to 4 bushels per hour. **Price, $7.25.**

No. 10—This Mill has beautiful outlines, as shown in illustration; will grind any kind of small grain; also oyster shells and dry bone. Capacity 2 to 4 bushels per hour. **Price, $9.00.**

DROP BOTTOM FOUNTAINS



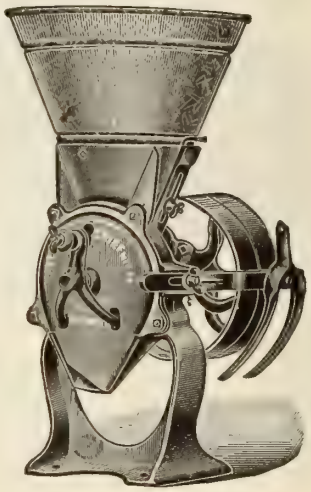
Drop Bottom, easy to fill and to clean. Has wire handle and may be hung on the wall out of the litter and dirt.

No. 41—Galvanized, 1 gallon, each . . $1.00
No. 42—Galvanized, 2 gallons, each . . 1.25
No. 136—Tin, Buttermilk Feeder, 1 gallon, each 1.50

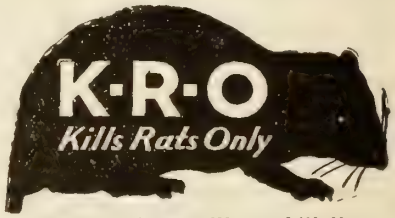
WALL FOUNTAINS

A large capacity fountain, made of heavy, tight coated, galvanized iron. Easy to fill, and nothing about it to get out of order.

	Each
No. 74—5 gal.	$1.75
No. 78—10 gallon, Giant Fountain	2.65



No. 20—Combined Hand-Power Mill. It is substantially constructed; all bearings bronze metal, and when run a speed of from 300 to 450 revolutions per minute will grind from 10 to 20 bushels per hour. Power required, from 1½ to 2 horse-power engine. **Price, $21.00.**



Not a poison, will not kill livestock, dogs, cats or poultry.
Price, 75c.

Poultry Waterer

Eight gallon capacity, plain, Kerosene or Electric Heated, with perch and legs.

No. B18 — Plain no heat (lamp may be added later), weight 30 pounds. **Price, $6.50 each.**

No. B19—With single burner flueless lamp, weight 31 pounds. **Price, $7.60 each.**

No. B20 — Base insulated and ready to receive electric light socket, weight 32 pounds. **Price, $8.50 each.**

Insulated Waterer

Keeps water warm in winter, and cool in summer.

No. PW3—3 gallon capacity, weight 17 pounds. **Price, $3.25.**

No. PW6—6 gallon capacity, weight 26 pounds. **Price, $4.20.**

Handy Fill Chick Fountain

No. C2 — Two gallon capacity, made of heavy galvanized iron in two pieces, shipping weight 5 pounds. **Price, $1.20 each.**

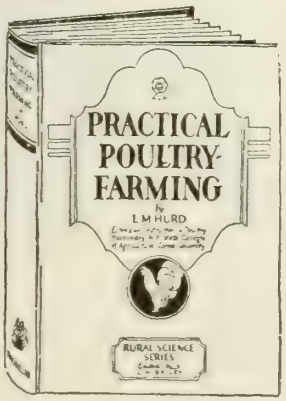
No. C3 — Three gallon capacity, shipping weight 6 pounds. **Price, $1.50 each.**

Non-Clog Combination Feeder

No. PF103—Made of heavy rust-resisting copper alloy galvanized sheets, 3 feet long, mash capacity approximately 100 pounds, 4 compartments for grit, shells, etc., built in at ends, for 75 to 100 hens. Shipping weight K. D. crated 60 pounds. **Price, $9.15.**

No. PF105—Five feet long, mash capacity approximately 150 pounds; 4 compartments for grit, shells, etc., built in at ends, for 125 to 150 hens. Shipping weight K. D. crated 96 pounds. **Price, $13.25 each.**

PRACTICAL POULTRY FARMING, by L. M. Hurd. Here are practical, useful, and money-making ideas on raising poultry for profit. Complete in every detail. The only book which tells the vitamin content of poultry feeds. 149 illustrations, 405 pages. **$3.50.**

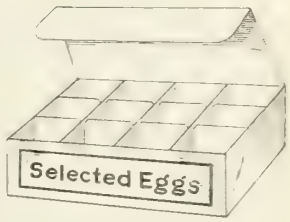


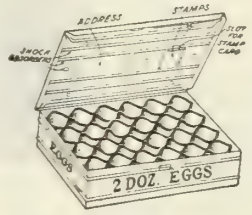
Poultry and Produce Scale

No. 83—Used by grocers, butchers, fruit dealers, etc. Also a reliable scale for use in the home, giving an accurate check on household purchases and supplies. Capacity 20 pounds by ounces; heavy steel throughout, equipped with a special tempered Hanson spring and gravity rack, adjusted by set screw at top, 6½-inch dial, 28-guage steel; figures in black on white enamel. Finish Black Japan and decorated in gold. Has a heavy prime galvanized machine-made scoop and chains. Height overall 28½ inches. Scoop size 18 by 14 inches. (Weight 5 pounds.) **Price, $2.75.**

Egg Cartons

These pasteboard egg cartons are just the thing for safely and quickly packing eggs in one dozen lots for delivery to your retail customers. The appearance and convenience of the package will increase your sales. **15c doz.; $1.00 per 100; $1.75 per carton of 250** (weight 27 pounds). Postage extra.





Metal Egg Crates

For Selling Eggs By Mail

Indestructible; pays for itself in a few shipments; lasts years; makes interchangeable shipping easy. Buy yours now and realize more money for your eggs. Your friends want them.

The Metal Edge Filler is a wonder. A new invention and cannot be beat for safely carrying Eggs by mail. Light in weight but strong.

Write us about Butter-Egg Crates

1-dozen size	$1.00	6-dozen size	$2.00
2-dozen size	1.25	9-dozen size	2.50
3-dozen size	1.50	12-dozen size	3.00
4-dozen size	1.75	15-dozen size	3.50

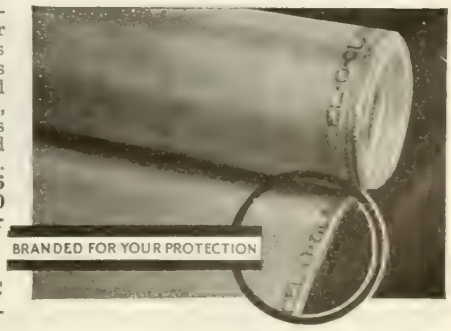
Postage Extra.

WATER GLASS

Used especially as an egg preservative. Mix 1 part with 9 parts of water. **1 qt., 30c; 1 gal. $1.00.**

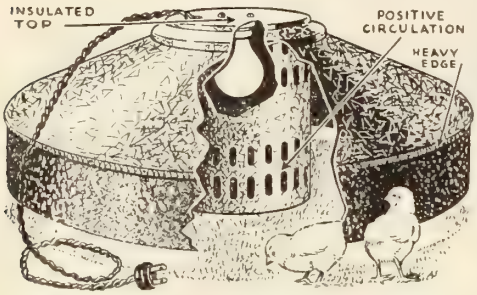
CEL-O-GLASS—VIO-RAY

Now guaranteed for 5 years. Unbreakable weather proof, transmits violet rays (Glass does not). Ideal for poultry house, fronts, windows and doors, and many other uses. **Standard Roll, 36 inches wide, 100 feet long, 41c per running foot.**



VIO-RAY WINDOW FABRIC

Scientifically processed white cloth, thin enough to admit violet rays, and yet strong enough for all weather. **Sq. yd., 23c; 10 sq. yds. or more, 20c.**



C-1 FLOOR BROODER

For the progressive small flock raiser who knows the advantages of electricity.

C-1 is fitted with socket for light bulb, 6 ft. of cord and curtain. (Bulb not furnished.)

C-1—22 in. diameter, light bulb, 75-100 chicks, weighs 8 lbs., price $2.50

C-2 has the BEACON heater and socket for pilot light.

C-2—22 in. diameter, 150 watt bulb, 75-100 chicks, weight 15 lbs.... 4.00

WAFER THERMOSTATS

Three inch double brass wafers filled with a special compound to operate on low brooding temperatures as well as in incubators. Stop your loss this year. Do not use old wafers. Give your brooders and incubators a fair chance. Order new wafers now. Specify plain or screw stud. **35c each.**

LITTLE PUTNAM STOVE, each.....$1.95
PUTNAM BROODER STOVES.....$4.25

OAKES HOT WATER INCUBATOR

No. D-98— 60-egg capacity, weight 25 lbs....**$7.50**
No. D-99—100-egg capacity, weight 40 lbs....**10.00**

ELECTRIC CANOPY BROODER

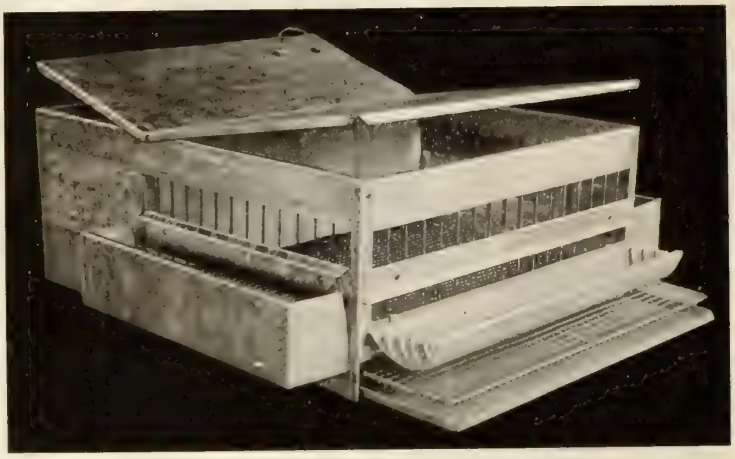
B-13—A steep pitch canopy which prevents roosting, ventilator furnishes a continuous circulation of air without drafts. Made of 26 gauge galvanized; heavy curtains, adjustable legs, has two independent heating circuits of 500 watts each—1,000 watts. Wired for 110 volts, can also be wired for 220 volts. Capacity 500 chicks, size 50 in. by 50 in., weight 75 lbs $18.75

B-1 JUNIOR BATTERY

(As Illustrated at Right)

A new box brooder giving all the wonderful results and low labor cost of the Battery system. Designed for the raiser of small flocks. So successful that it is being adopted by many big operators. Note the open sides and ample ventilation. Chicks will not develop rapidly in a closed tight brooder. This Brooder has a 150 Watt "Beacon cement coated" heating element controlled by a quick make and break non-radio interfering Thermostat, the finest tinned floors you ever saw.

Dimensions: 24x30 inches. Capacity, 80 day-old chicks. Weight, cartoned, 26 pounds. **$7.25.**



B-1 Junior Battery

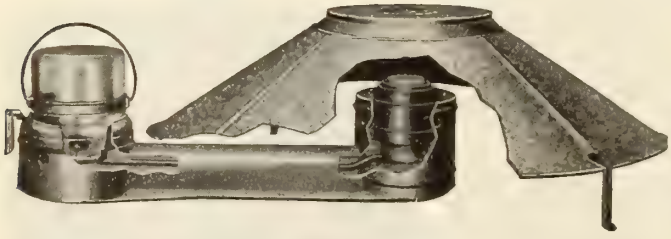
COAL BURNING BROODERS

Capacity—	Reliable 500 chicks	Imperial 1000 chicks	Eureka 1200 chicks
Height to Top of Stove....	22 in.	25½ in.	27 in.
Diameter of Hover.....	42 in.	52 in.	56 in.
Diameter of Grate.....	9 in.	10¼ in.	11½ in.
Shipping Weights (complete)	82 lbs.	105 lbs.	122 lbs.
Price	**$10.00**	**$12.00**	**$17.50**

ELECTRIC BROODERS

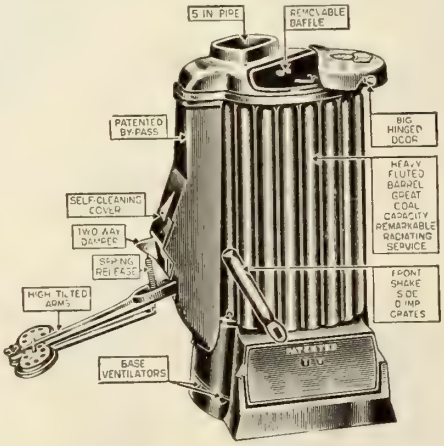
56-in., 375-chick $22.50
65-in., 550-chick 27.00

THE "SIMPLICITY" OIL BROODER



Brazed Oil Assembly. Wire Edged Canopy. Attractive Steel Shell. Patented Hand Control. Unexcelled Wickless Blue Flame Burner. Entire Simplicity.

35-in. Canopy—Capacity 150 chicks, weight 34 pounds..**$10.00**
45-in. Canopy—Capacity 250 chicks, weight 38 pounds.. **11.00**
55-in. Canopy—Capacity 500 chicks, weight 51 pounds.. **12.00**



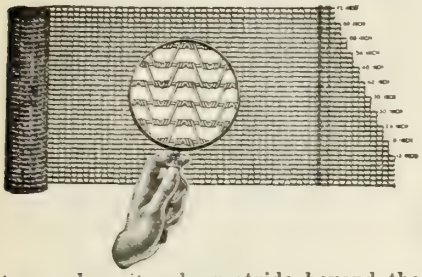
"MAKOMB GIANT" COAL BROODER

Stove made of heavy cast iron, burns any kind of coal, easy to clean. Has a tilting canopy made of heavy galvanized steel, arranged to make refueling easy. Stove pipe size 5 inches.

Canopy Diameter	42 in.	52 in.	62 in.
Actual Coal Capacity.....	35 lbs.	52 lbs.	73 lbs.
Actual Chick Capacity.....	350	600	800
Diameter of Grates.....	11 in.	11 in.	13 in.
Prices	**$13.00**	**$17.50**	**$22.00**

UNITED STATES POULTRY NETTING

United States Poultry Fence is strictly a "NO SAG" fence, as the combination of line and mesh wires, closely woven, prevents any lengthening or narrowing between posts. In erecting U. S. Poultry Fence the line wires permit of being stretched to a high tension, which compels the fence to remain rigid and upright without anchoring it to a baseboard or top rail. These features place it a long stride beyond the Hex mesh netting, which never fails to narrow and lengthen if you attempt to stretch it to a tention required to prevent sagging.



There is no netting on the market that compares with U. S. Poultry Fence for strength, beauty and durability, and we invite comparison with other makes, feeling confident that all our claims of superiority will be substantiated.

Made of No. 19 hard steel wire, double twisted and galvanized after weaving.

2-inch Mesh—Put up in Rolls of 150 feet

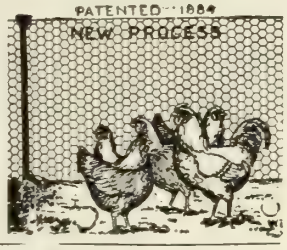
	19 guage	20 guage
12-inch	$1.20	$1.05
24-inch	2.15	1.85
36-inch	2.95	2.50
48-inch	3.90	3.35
60-inch	4.90	4.20
72-inch	5.90	5.00

In less than Roll lots, 1½c a square foot.
Also made in 1-inch Mesh. Price on application.

1-inch Mesh (Hexagon)

12-inch, 150 square feet	$2.25
18-inch, 225 square feet	3.25
24-inch, 300 square feet	4.20
30-inch, 375 square feet	5.00
36-inch, 450 square feet	5.70
48-inch, 600 square feet	7.60

Less than roll lots, 3c square foot.
Poultry Netting Staples, pound, 10c.



American Steel Fence Posts

Made by American Steel & Wire Company

LINE POSTS

5-foot	$ .40
6-foot	.48
6½-foot	.53
7-foot	.56
7½-foot	.60
8-foot	.64

Special Prices on Quantities.

Ball Tops for Line Posts, 23c; Corner Posts, 36c; Pig-Ear Latch, 75c; Driving Caps for Line Post, 36c.

JUNIOR CORNER AND END POSTS

Painted		Galvanized	
6-ft. end	$1.05	6-ft. end	$1.25
8-ft. end	1.35	8-ft. end	1.55
6-ft. corner	1.55	6-ft. corner	1.75
8-ft. corner	2.05	8-ft. corner	2.30

T-BAR STEEL POSTS

Bar Iron—Special Price on Quantities

6½-foot	$ .41	7½-foot	$ .47
7-foot	.44	8-foot	.50

CHAMPION WIRE STRETCHER

No. 1 has hickory handle and malleable clamp; can be quickly adjusted, and is a favorite with fence builders. **Price, $1.50.**

RATCHET WIRE STRETCHER

Is operated by one man and holds the wire in any desired position. **Price, $1.50.**

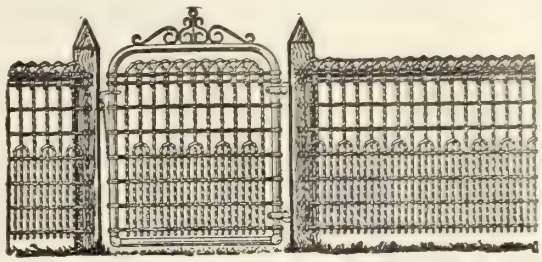
BARBED WIRE—GALVANIZED

Hog—4 in. between barbs, 80 rod spools	$3.25
Cattle—6 in. between barbs, 80 rod spools	3.05

RIBBON WIRE

Galvanized, per 100 pounds..... $8.00

Pioneer



ORNAMENTAL LAWN FENCE

Very attractive and we believe the most durable wire lawn fence made. Heavy galvanized. Spaces, 1¼ inches; wire, No. 9 Crimped Pickets in No. 12½ Tw. Cables.

Price, 36-inch, per foot, 14c; per 100 feet..... $12.00
Price, 42-inch, per foot, 15c; per 100 feet..... 13.00
Price, 48-inch, per foot, 17c; per 100 feet..... 15.00

In Rolls of 150 feet, deduct 1c a foot.

Style 100—36 in., per 100 ft., $9.00 42 in., per 100 ft., $10.00

FLOWER GUARD

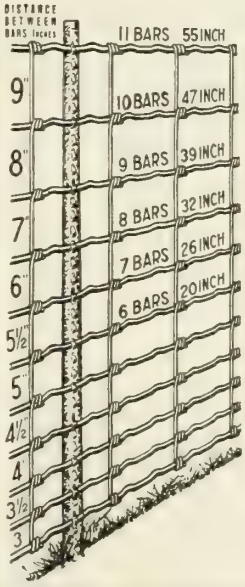
Designed for protecting Flower Beds

16-inch, per foot.....7½c 22-inch, per foot....8½c
100 feet or more, 1c per foot less.
Trellis—18-inch, 9½c ft.; 24 inch.....10c ft.

ORNAMENTAL GATES

Heavy steel frames, filled to match the fence; fittings for Jr. 1¾ in. posts included.

Height	Distance Between Posts 3 ft.	3½ ft.	4 ft.	8 ft.	10 ft.
36-inch	$3.10	$3.25	$3.35	$7.70	$9.00
42-inch	3.25	3.35	3.45	7.85	9.25
48-inch	3.40	3.50	3.60	7.95	9.40



PIONEER POULTRY FENCE

An ideal fence against poultry and small animals. The spacing is graduated from 1½ inches at the bottom to 5 inches at the top, and the distance between the stays is 6 inches.

No. 1948—48 inches high, per roll of 165 feet, $5.25.

No. 2158—58 inches high, per roll of 165 feet, $5.75.

LIBERTY POULTRY FENCE

4 feet high, 10-rod Roll	$4.00
5 feet high, 10-rod Roll	4.66
6 feet high, 10-rod Roll	5.28
7 feet high, 10-rod Roll	5.95

AMERICAN FARM FENCE

Thoroughly galvanized, with hinge joint patent lock knot.
Let us send descriptive folder.

No. 635—6 strands, 35 inches high, 12-inch stays, per rod, 25c

No. 845—8 strands, 45 inches high, 12-inch stays, per rod, 31c.

Regular No. 1047—10 strands, 47-inch height, 12 in. stays, 35c.

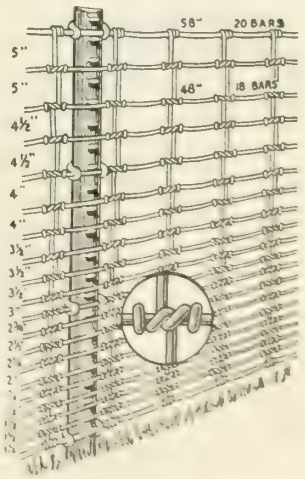
Hog Style, No. 726—7 strands, 26 in. high, 12 in. apart, 27c.

Hog Style, No. 726—7 strands, 26 in. high, 6 in. apart, 33c.

Hog Style, No. 832—8 strands, 32 in. high, 12 in. apart, 30c.

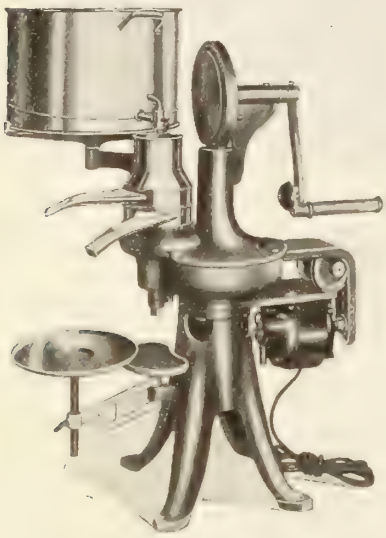
Hog Style, No. 832—8 strands, 32 in. high, 6 in. apart, 38c.

Put up regular in 20-rod Rolls.
Prices subject to change.
10-Rod Rolls, 25c per Roll Extra.



DAIRY SUPPLIES

NEW E-Z AMERICAN SEPARATOR



No other separator gives you the advantages of the newly-developed American. Gets ALL the cream, low speed preventing frothing; bowl needs no rebalancing, new polished stainless steel discs, unmatched for easy turning, only separator with waist-low supply tank; greatest value for price charged. A size for any capacity. We offer the following three models for comparison.

Smaller models at exceedingly low prices. Let us quote.

No. 50, Regular Dairy Style, Upright—Capacity 500 pounds of milk per hour. Skims about 62 quarts in 15 minutes. **Price, $59.50.**

No. 50, Electric, with Standard make Motor, as shown in illustration. Price, Complete, $91.50.

BOSS CREAM SEPARATOR

Every small dairy should certainly have the Boss. It means one-quarter more cream of better quality and saves one-quarter the time. No machinery to run or look after. Separation is effected by circulation of cold water in outer can. All the cream rises to the surface in an hour or two and is drawn off sweet. Suitable for table use or other purposes.

2½	gallons, capacity 1 to 2 cows	$6.00
4	gallons, capacity 3 to 4 cows	6.50
6	gallons, capacity 4 to 5 cows	7.25
8	gallons, capacity 5 to 7 cows	8.00

TWIN SEPARATOR

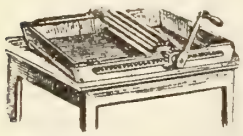
Has many advantages over the separator with a single milk vessel; one can be used in the morning and the other in the evening. Made in 5 to 20 gallon sizes.
2 cans, 12 gallons, capacity 6 to 7 cows.....$14.25

DAIRY THERMOMETERS, each.....75c.
CREAM-TESTING TUBES, each.....60c.

PARCHMENT BUTTER PAPER

Is furnished in sizes: 24x36, 9x12, 6x9, 6x6. **Price, per pound, 25c.** By mail, add regular Parcel Post rate.

BUTTER WORKER



Inside Measurement	Cap.	Price
No. 1—23x36x2½ in.,	50 lbs.	$21.50
No. 2—20x36x2½ in.,	30 lbs.	17.00
No. 3—17x27x2½ in.,	20 lbs.	15.35

DANDELION BUTTER COLORING

Dandelion Brand Butter Coloring is guaranteed to be purely vegetable, and that the use of same for coloring butter is permitted under all Food Laws—State and National.

Will not color the buttermilk; will never turn rancid; gives the brightest and best color; butter never becomes reddish; perfect economy in use. It is cheaper than any other coloring. Put up in four sizes.

Small size to color 500 pounds.....$ .35
Medium size to color 1250 pounds..... .65
Large size to color 2800 pounds..... 1.25

MILK CANS

Made of special heavy cold rolled milk-can material. One of these cans will outlast two of the common light-weight cans. Sold at very attractive prices. 5-gallon size only.
No. 205—Umbrella Cover, 13 pounds empty, each.....$3.50

HUDSON COW STANCHIONS

Tubular Stanchions (No. 105). These stanchions are wood lined, and so constructed as to be comfortable, strong and durable. They are made of high quality metal with but very few working parts to get out of order. The wood lining is a very important feature, as it is a protection against the cold iron. **Price, $3.85 each.**

B-K

BACILI-KIL

Disinfectant Deodorant Antiseptic

A powerful non-poisonous germicide extensively used by dairies, poultry and stock farms. **10 oz., 50c; qt., 90c; 1 gal., $2.00.**

New Powder Form. 9 oz. bottle makes 1 gallon B-K solution, 75c.

KELLY DUPLEX GRINDING MILLS

The only mill manufactured which has double or duplex grinders. It has a grinding surface of just double that of any other mill of equal size, and therefore can do twice as much work; or as much work as any other mill twice its size. Grinds any kind of grain, cotton-seed, corn and cob, and corn, cob and shucks equally well, and produces a grist of any desired quality—coarse, medium or fine. Its shifting device for regulating the grinding is the most perfect known. A positive force feed, no choking; no end thrust on the main shaft under any conditions. Simple in construction, easily operated, strong, durable and efficient.

No. 1—3½ to 6 horsepower. Three feet 4 inches high, shaft 3 feet 6 inches long; capacity 8 to 18 bushels ear corn, according to power and speed. **Price, $57.00.**

No. 11, Junior—3 to 6 horsepower. Height 3 feet 2 inches, length of shaft 3 feet 2 inches; capacity 6 to 12 bushels ear corn, according to power and speed. **Price, $38.00.**

KOW-KARE

The Great Cow Tonic and Conditioner for toning up the appetite and stepping up milk production through its action as a stomachic of genuine merit, an alterative and general regulator of cows subjected to modern conditions of forced production.

1¼-pound can.....Price, $ .65
2¾-pound can.....Price, 1.25

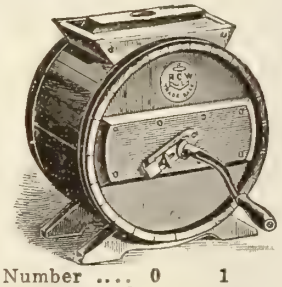
CONKEY'S FLY KNOCKER

The best preparation on the market for keeping flies off cattle and horses. Easily sprayed on and retains its strength all day, allowing the cows to pasture without annoyance, and therefore assists in the production of milk. **Qt., 60c; gal., $1.50.**

CONKEY'S CALF MEAL

Quality is of more importance in Calf Meal than in any other feed; it pays to buy the best. The advantages in feeding it are many. 1. It saves milk. 2. It costs less to feed. 3. It makes better veals. 4. You can raise your own dairy cows on it cheaper than they can be bought. 5. It leaves more milk to sell, and more profit to you. Satisfaction guaranteed. **25 lbs., $1.35; 100 lbs., $5.00.**

CYLINDER CHURN



Made of selected white cedar and well put up.

Full Churning Capacity				
Number	1	2	3	4
Gallons	1½	2	3½	6
Price	$4.25	$5.00	$6.00	$7.25

BARREL CHURN

Oak stave; steel top; it works by concussion and will not break the grain of the butter nor make it of a salvy consistency.

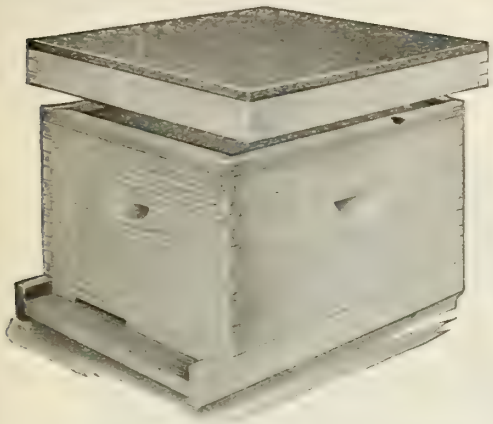
Number	0	1	2	3	4	5	6
Gals. ch'rn'd	3	5	7	10	13	18	30
Price	$6.00	$6.75	$7.50	$8.25	$10.50	$12.00	$16.50

BUTTER SHIPPING BOXES

20-pound prints.....$13.75 40-pound prints.....$19.75
30-pound prints..... 16.00 56-pound prints..... 23.75

HAND BUTTER PRINTS

½-lb. Seeley Pattern, as shown in cut .....$ .75
Baltimore Pattern 1.25
Round Print and Mould..... .40



One-story 10-frame metal covered hive with frames and no foundation, K. D., $3.35; 5 for $15.10.

ROOT QUALITY BEE SUPPLIES

FRAMES	10	100
Hoffman Frames	$ .70	$5.40
Shallow Frames with thick top bars	.55	4.80

SECTIONS—PLAIN	100	500	1000
4¼x4¼x1⅞	$1.30	$6.25	$12.50
4x5x1⅜	1.20	5.75	11.50
4¼x4¼x1½	1.10	5.25	10.50

Split $1.00 per 1,000 extra.

FOUNDATION	10 Sheets	50 Sheets
Three Ply (8x16¾)	$ .90	$4.15
Medium Brood (8x16¾)	.75	3.50
Medium Brood (4½x16¾)	.45	2.00

Super Foundation (Any Size), 1 lb., 70c; 5 lbs., $3.25.

Let Us Send Complete Free Catalog

For Quick Service Mail Your Orders To Us. Prices F. O. B. Baltimore

GOULDS AUTOMATIC OILING PYRAMID PUMPS

Figure 1741

By adding an entirely automatic oiling power end to the famous "Pyramid" double-acting pump, GOULDS have a pump unsurpassed for general pumping service. Machine-cut gears operating in a bath of oil, impossibility of crankcase dilution, and long life are noteworthy features of this pump.

Size	Gals. per Minute	Speed R. P. M.	Suction and Discharge Size	Tight and Loose Pulleys	Price (Pump Only)
2x2	13	250	1¼	12x2½	$60.00
3x2¾	25	150	1½	15x2½	91.00
4x2¾	44	150	2	15x2½	130.00
5x4	82	125	2½	16x4	203.00

KANAWHA WOOD PUMPS

Porcelain Lined—Ready to Set in the Well
Subject to Cash Discount

Depth of Well	No. 2 6x6	No. 5 7x7	Depth of Well	No. 6 6x6	No. 4 7x7
8 ft.	$12.20	$14.80	31 ft.	$27.50	$31.50
9 ft.	12.60	15.20	32 ft.	27.90	31.90
10 ft.	13.00	15.60	33 ft.	28.30	32.30
11 ft.	13.40	16.00	34 ft.	31.10	35.10
12 ft.	13.80	16.40	35 ft.	31.50	35.50
13 ft.	14.20	16.80	36 ft.	31.90	35.90
14 ft.	14.60	17.20	37 ft.	34.70	38.70
15 ft.	15.00	17.60	38 ft.	35.30	39.10
16 ft.	15.40	18.00	39 ft.	35.50	39.50
17 ft.	15.80	18.40	40 ft.	35.90	39.90
18 ft.	16.20	18.80	41 ft.	39.90	43.90
19 ft.	16.60	19.20	42 ft.	40.30	44.30
20 ft.	17.00	19.60	43 ft.	40.70	44.70
21 ft.	17.80	21.00	44 ft.	41.10	45.10
22 ft.	18.60	21.40	45 ft.	43.90	47.90
23 ft.	19.00	21.80	46 ft.	44.30	48.30
24 ft.	19.40	22.20	47 ft.	44.70	48.70
25 ft.	19.80	22.60	48 ft.	46.30	50.30
26 ft.	21.00	24.00			
27 ft.	21.40	24.40			
28 ft.	21.80	24.80			
29 ft.	23.80	27.20			
30 ft.	24.20	27.60			

We shall be pleased to quote attractive prices on Galvanized Pipe.

GOULDS HYDRAULIC RAMS

GOULDS Hydraulic Rams are a very economical means of elevating water to storage tanks without outside power. Energy of the falling water does the work without attention or care. All working parts of bronze and will give a lifetime of service.

Fig. 1701—No. 3. Price, $17.75 **Fig. 1701—No. 4. Price, $23.00**
Fig. 1702—No. 5. Price, 28.25 **Fig. 1703—No. 6. Price, 45.00**

GOULDS SINGLE-ACTING DISTRIBUTING FORCE PUMP HEAD

Surface and Underground Discharge

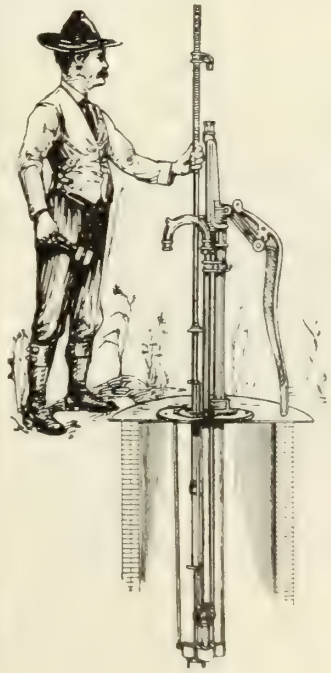
GOULDS Fig. 1482 is suitable for either hand or windmill operation and is good for lift and forces up to 135 feet. Underground discharge is 46 inches below base of pump and is operated by conveniently located handwheel. Adjustable 6, 8, 9 and 10-inch stroke.

Price, $21.00.

GOULDS "EMPIRE" DOUBLE-ACTING FORCE PUMP

With Guided Top and 3-Way Discharge

GOULDS Fig. 1731 Double-Acting Pump is built in 2 sizes with 2½x12-inch and 3x12-inch cylinder for hand, windmill or with use of jack, for power drive. An exceptionally well built pump for general farm use. Cylinders are brass lined. Either size, $25.40.



RED JACKET IRON EASY-TO-FIX PUMPS

Prices quoted below are Pumps ready to set in the well. Subject to Cash Discount.

Fig. 28		Fig. 37-4	
Depth of Well.	No. 1, 3-inch Cylinder. Double Act.	Depth of Well.	2½-inch Cylinder. With 3-Way.
10 ft.	$18.95	28 ft.	$39.50
12 ft.	19.25	30 ft.	40.75
14 ft.	19.55	32 ft.	42.00
16 ft.	19.85	34 ft.	43.25
18 ft.	20.15	36 ft.	44.50
20 ft.	20.45	38 ft.	45.75
22 ft.	20.75	40 ft.	47.00
24 ft.	21.05	42 ft.	48.25
26 ft.	21.35	44 ft.	49.50

If 3-Way is not wanted for Fig. 37-4, deduct $5.00.

If 3-Way is wanted for Fig. 28, add $5.00.

Let us quote other sizes.

MISCELLANEOUS FARM SUPPLIES

ROOFING MATERIAL

MINERAL SURFACED

Balmar—Furnished in Red, Green or Blue-Black (100 sq. ft.). **Per roll, $2.20.**

SMOOTH SURFACED

Continental—Heavy or "3-ply" (100 sq. ft.). **Per roll, $2.35.**

Apex—Medium or "2-ply" (100 sq. ft.). **Per roll, $1.55.**

Battle Axe—Light or "1-ply" (100 sq. ft.). **Per roll, $1.05.**

MULTI SHINGLES

(4 in 1) Mineral Surfaced. **Per square, $6.65.**

TARRED FELT

No. 15—36-inch, 216 square feet, 31 pound roll. **Per roll, $1.15.**

No. 25—36-inch, 216 square feet, 54 pound roll. **Per roll, $2.00.**

Less special discount in lots of 10 rolls or more.

KURE-A-LEAK

A semi-liquid mastic or cement-like composition, not affected by extreme heat or cold; absolutely water tight and fireproof. It "kures" the leaks in wornout tin, galvanized iron or composition roofings. **1 gal., 75c; 5 gals., $2.15.**

CORRUGATED IRON ROOFING

Heavy galvanized iron corrugated roofing is always carried in stock in all the standard sizes. Prices subject to change. **$4.75 per square** (100 square feet.)

CHANNELDRAIN ROOFING

Made of

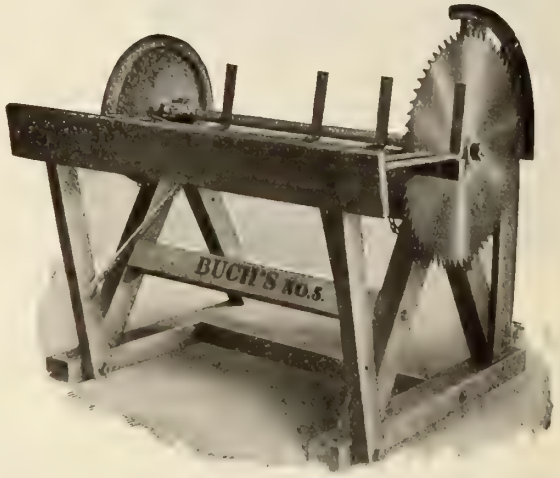
COP-R-LOY

The Copper-Alloyed Steel That Resists Rust and Corrosion

Channeldrain has a barrier to leaks—a vertical wall running the entire length of the lap—and no water gets by this wall. The channel formed by the patented design of Channeldrain roofing carries off the water before it can mount the ridge. This means that Channeldrain roofing goes farther than other metal roofing in doing what roofing is intended to do—IT DRAINS OFF ALL THE WATER THAT FALLS ON THE ROOF, permitting the surface to dry quickly and prevents rust under the laps and around nail holes. It is easy to understand the economy in roofing that has these advantages—and only Channeldrain has them.

You can apply Channeldrain yourself and enjoy the superior benefits of this modern patented roofing, with freedom from repairs through long years to come. It will save money for you. **28 gauge, 5½c per square foot.**

SAW FRAMES

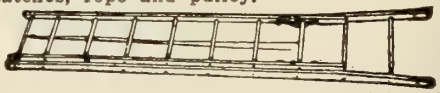


Built of hard wood, mortised and tennoned, and full bolted; with Cold Rolled Steel mandrel; heavy balance wheel, and the table firmly hinged to frame—thoroughly braced and reinforced. The blades are made of genuine saw steel and have given universal satisfaction.

No. 3—With 24-inch Blade	$26.50
No. 5—With 24-inch Blade	26.50
No. 4 "Pony Saw"—18-inch Blade	17.00

LADDERS

Made of the very highest quality lumber and assembled to give the safest, most durable and most rigid construction. Side rails made of the best selected Norway, Southern Pine or Spruce and the rungs are Hickory. Equipped with sturdy gravity catches, rope and pulley.

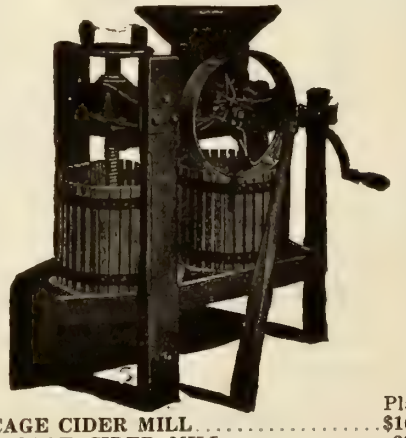


LIBERTY EXTENSION LADDERS

20 ft.	$8.35	24 ft.	$10.00
28 ft.	11.75	30 ft.	12.50
32 ft.	13.40	36 ft.	15.30
40 ft.	17.00	44 ft.	18.75

STRAIGHT LADDERS, 14, 16-foot ..... Per foot, 28c
STRAIGHT LADDERS, 18-foot ..... Per foot, 29c

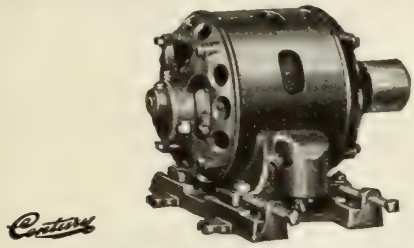
RED CROSS CIDER MILLS AND WINE PRESSES



	Plain	Hinged Cages
SINGLE CAGE CIDER MILL	$16.50	$17.00
JUNIOR 2-CAGE CIDER MILL	22.50	23.00
MEDIUM 2-CAGE CIDER MILL	26.50	27.50
SENIOR 2-CAGE CIDER MILL	37.50	39.50
No. 1 FRUIT PRESS	8.00	8.50
No. 2 FRUIT PRESS	11.00	11.75
No. 3 FRUIT PRESS	16.00	16.75
No. 5 FRUIT PRESS	25.00	26.00

MISCELLANEOUS FARM SUPPLIES

CENTURY ELECTRIC MOTORS



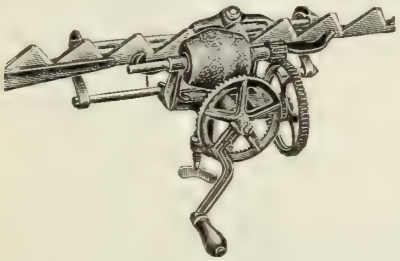
Repulsion Start Induction Single Phase Motors fill the demand for motors where high starting torque, low starting current, quiet and automatic operation are desirable.

The ¾ Horse Power and smaller are equipped with the Century Wool Yarn System of Lubrication, which insures proper lubrication for at least one year of continuous operation. The larger sizes are equipped with ring oilers. The brushes are in service and touch the commutator only while starting.

All prices listed below are for 110/220 volts, 60 cycle ratings, and they include pulley and belt tightening base with 1/3 Horse Power and smaller, and rails with larger sizes.

Horse Power	Syn. Speed	Standard Pulley Diam.	Face	Bore	Prices
⅙	1800	2	2	½	$22.30
¼	1800	2½	2½	⅝	26.10
½	1800	3	2½	¾	41.00
¾	1800	3	2½	¾	51.00
1	1800	3	2½	¾	62.00
1½	1800	4	3½	1	80.00
2	1800	4	3½	1	90.00

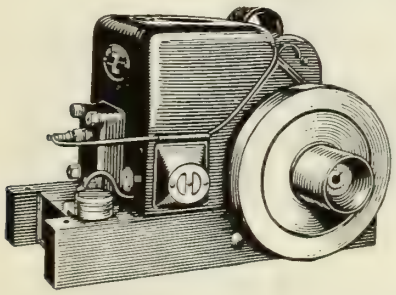
No. 82 TOOL GRINDER



This very useful grinder is especially suited to farm work and can be easily clamped to a mower wheel or bench; compact, simple and serviceable.

82 C —With Bevel Tool Wheel only.....$6.50
82 CW—With both Flat and Bevel Tool Wheels..... 7.50

FAIRBANKS MORSE TYPE "Z" ENGINES



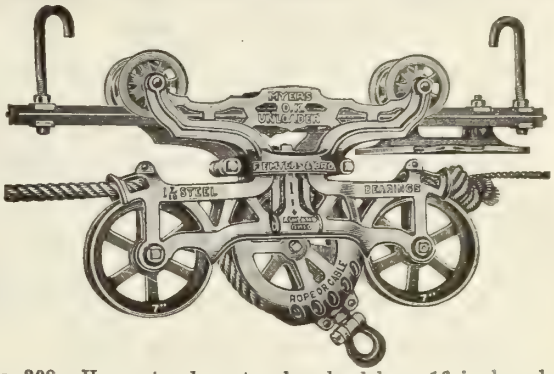
Compact, self oiling, fully enclosed and yet easily accessible. Designed to meet the present and future demands of users of small engines. Equipped with guaranteed ignition, Type "R" Rotary High Tension Magneto. Easy to start, magneto sealed against dirt, dust, water and oil. Let your next engine be a "Z" and learn what real dependability is.

1½ H. P. .....$60.35 3 H. P.....$101.55

Let us quote larger sizes on request.

1½ Horse Power Illustrated.

MYERS' DOUBLE LOCK UNLOADERS



No. 208. Has extra long truck, wheel base 16 inches, large steel bearings, 7-inch sheaves, reversible and swivel, for double steel track, designed for heavy work. **Price, $12.50.**

MYERS' CLOVER LEAF UNLOADER

No. 118. This is the well-known reversible car for double steel track. The locking device grasps the fork pulley on either side and permits it to swing free. **Price, $10.25.**

Double Steel Track. Price, per foot, 25c.

Hanging Hooks. For double steel track. **Price, each, 18c.**

Rafter Brackets. Steel. **Price, each, 6c.**

Pulleys, 6-inch; wood sheaves; malleable iron frame. Price, each, 75c.

Pulleys. Knot-passing swivel; 6-inch malleable iron sheave. **Price, each, 80c.**

Double Harpoon Forks. All steel. **Price, each, $2.50 to $6.00.**

Floor Hooks, ¾-inch wrought iron. **Price, each, 18c.**

WAGNER BARNDOOR HANGER

Extra Heavy All Steel and Self-Cleaning

Tandem, Ball-Bearing Rollers, per set.....$2.00
No. 15 Tubular Steel Track, per foot..... .25
No. 100 Evertight Steel Track, per foot..... .32
Steel Brackets, each..... .20

RURAL MAIL BOX

In order to better serve the patrons and with less effort on the part of the carrier, the Post Office Department adopted the new box and have provided a receptacle that will take the regular mail and parcels as well.

Body made of No. 20 guage galvanized steel, door No. 18 guage, bottom and rear No. 20 guage. Inside of box has a corrugated drain board to provide for any water accumulation. Finished in aluminum bronze, flag bright red enamel. Size of box 23½ inches long, 11¼ inches wide, 14 inches high. **Price, $3.25.**

SOIL IMPROVEMENT MATERIALS

BLACK LEAF STERILIZED GROUND TOBACCO STEMS

A finely ground, organic fertilizer material. An ideal and readily available source of necessary elements for your lawn, flowers, truck, market garden, and green house crops, and fruit. Better than stable manure, and makes a superior compost. Adds humus. Thoroughly sterilized, therefore free of weed seeds. Supplies ORGANIC Nitrogen and ORGANIC Potash. Does not burn tender roots. Economical, easy to use, and safe for every purpose. Guaranteed 1.16% Nitrogen, 4% Potash. Being a "natural" fertilizer carries nearly all of the minor elements that a plant demands, particularly Magnesium for flower and leaf color. Apply at rate of 5 to 10 pounds per 100 square feet, or 1000 to 2000 pounds per acre for all truck crops, tobacco, fruit, tomatoes, potatoes, etc. **10 lbs. 25c; 25 lbs. 50c; 100-lb. bag, $1.50; ton, $20.00.**

BONE MEAL (Extra Fine)

An excellent fertilizer, especially recommended for lawns, rose bushes, grape vines, and deep-rooted shrubbery, where it is desired to furnish the plants with a perfectly safe, slow-acting but continuous supply of nourishment. Florists and nurserymen use large quantities of our bone meal very successfully. **10 lbs., 35c; 25 lbs., 75c; 50 lbs., $1.35; 100-lb. bag, $2.25.** Let us quote special price on quantities.

HYPER-HUMUS

A pure organic material prepared for the purpose of building up the lawn. Is odorless, and being neutral in action can be used on all plants. **100-lb. bag, $2.00.**

PULVERIZED SHEEP MANURE

One of the most popular fertilizers for lawns, thoroughly dried and pulverized, giving lasting results. For top dressing of lawns use 1 ton per acre, applying in fall or early spring. **5 lbs., 20c; 10 lbs., 35c; 25 lbs., 75c; 100-lb. bag, $2.00; ton, $33.25.** Let us quote special price on quantities.

CHILEAN NITRATE OF SODA

Highly soluble, quick in action and hastens the maturity of crops fully two weeks. Champion Brand (shot form.) **Lb., 5c; 10 lbs., 35c; 100 lbs., $2.15.** Special price ton lots.

ALUMINUM SULPHATE

For rhododendrons and azaleas. **10c lb.; 10 lbs., 50c; 100 lbs., $3.75.**

BLOOD MEAL

One of the best plant foods for forcing flowers and vegetables. Excellent for rose bushes during blooming season. **10c per lb.; 3 lbs., 25c; 25 lbs., $1.00; 100 lbs., $3.50.**

LAND PLASTER

Useful as a medium for retaining moisture and the fluids and ammoniates of manure. **80-lb. bag, 90c; ton, $19.00.**

HYDRATED LIME

Especially useful for correcting acid condition of soils in gardens and lawns. **50-lb. bag, 50c.** Let us quote ton prices.

ADCO

Is a powder, which, when mixed with almost any non-woody vegetable waste, and kept wet, gradually converts it into manure.

50 pounds of ADCO makes a ton of manure. Equal to stable manure—Odorless. **Prices: 150 lbs., $10.50; 25 lbs., $2.00.**

PEAT MOSS

Promotes Growth by Improving Texture of Soils and Regulating Supply of Moisture
Investigate its Many Advantages

Granulated Peat Moss has rapidly come into general use for horticultural purposes, and large commercial growers recommend it highly as a moisture retaining humus, unsurpassed for mulching. It is excellent for clayey, light, sandy or gravelly soils, beds, hotbeds, coldframes, greenhouse benches, in potting soil and as a winter protection for lawns. Also as a mulch on strawberry, perrenial beds, roses, rhododendrons, azaleas, evergreens, ferns, etc.

Baby Bale	2½ Bushels	$0.75
Garden Bale	5 Bushels	1.10
Junior Bale	10 Bushels	1.50
Large Bale	20 Bushels	2.50

Special Price on Larger Quantities

FISH BONE POTASH FERTILIZER

FOR BETTER PRODUCTION

Guaranteed Analysis

The Commercial Fertilizers which we offer are made by one of Baltimore's largest and most reliable manufacturers. Animal base products are consistently used, making a plant food which in its chemical action in the soil is best suited for continuous growth of the crops .

Analysis	Bag 167 lbs.
2-12- 2	$2.00
5- 8- 5	2.50
4- 8-10	2.75
7-12- 7	3.00

Let Us Quote Latest Low Prices On Ton Lots Or More.

INOCULATE ALL LEGUMES WITH **NITRAGIN** The Original Legume Inoculator

Expiration Date and High Germ Count on Every Package

INOCULATOR PRICES

When ordering, always specify kind of seed.

Alfalfa, all Clovers and Lespedeza

Size	Retail
½ bu.	$ .35
1 bu.	.65
2½ bu.	1.40

Peas, Vetch, Austrian Winter Peas and Beans

Size	Retail
½ bu.	$ .35
1 bu.	.50
•1½ bu.	.80
5 bu.	$2.25

•"100 lb. size." Packed only for Vetch and Peas.

Soy Beans and Cow Peas

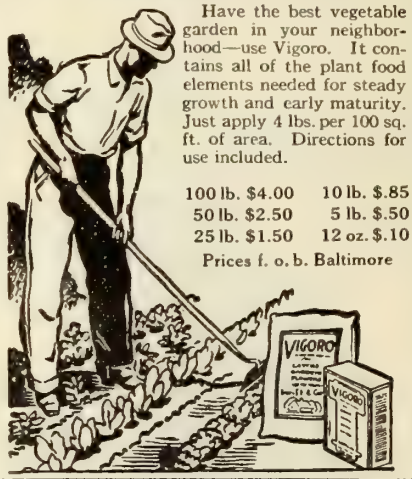
Size	Retail
1 bu.	$ .35
2 bu.	.65
5 bu.	1.40
10 bu.	$2.45

Garden Size NITRAGIN

Inoculates from 1 oz. to 8 lbs. seed, Price 25c

Retail Price...25c each

Vegetables Need Vigoro



Have the best vegetable garden in your neighborhood—use Vigoro. It contains all of the plant food elements needed for steady growth and early maturity. Just apply 4 lbs. per 100 sq. ft. of area. Directions for use included.

100 lb. $4.00	10 lb. $.85
50 lb. $2.50	5 lb. $.50
25 lb. $1.50	12 oz. $.10

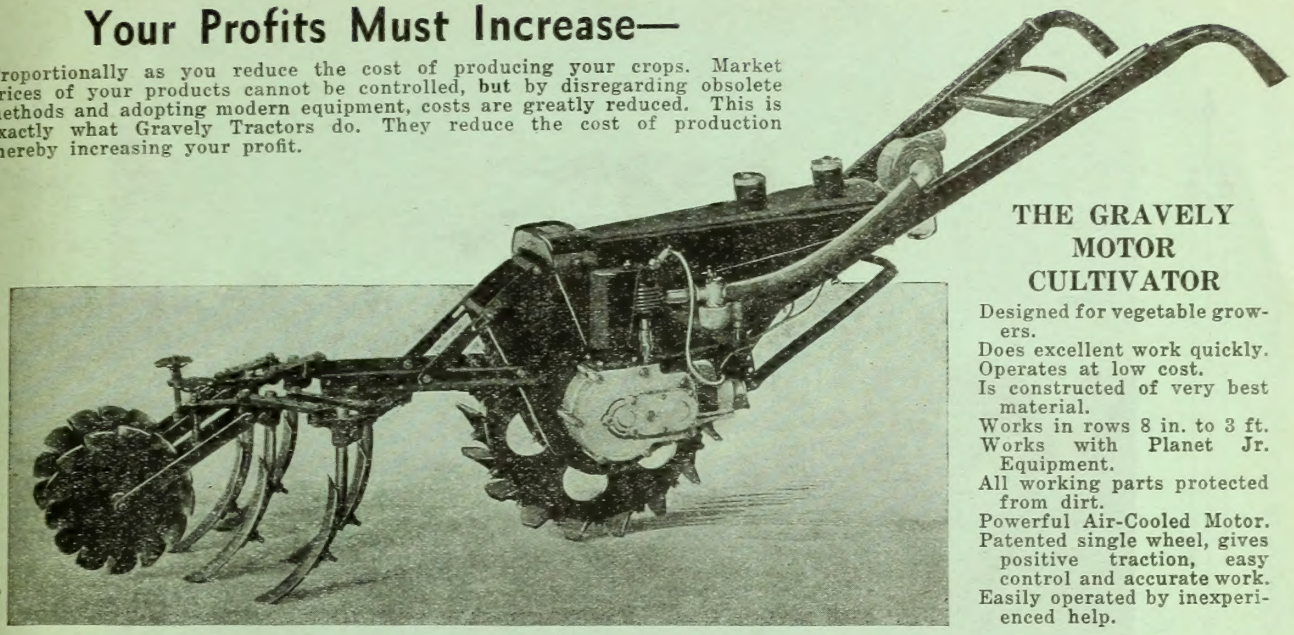
Prices f. o. b. Baltimore

PLANTABBS

These TABLETS are very concentrated, are high in per cent of vital elements, nitrogen, ammonia, phosphoric acid and potash, properly balanced, they dissolve quickly, giving immediate fertilization which promotes vigorous growth, more blooms, richer colors and bring vegetables two weeks earlier. **30 Tablets, 25c; 75 Tablets, 50c; 200 Tablets, $1.00; 1000 Tablets, $3.50.** (By mail add 10%.)

Your Profits Must Increase—

Proportionally as you reduce the cost of producing your crops. Market prices of your products cannot be controlled, but by disregarding obsolete methods and adopting modern equipment, costs are greatly reduced. This is exactly what Gravely Tractors do. They reduce the cost of production thereby increasing your profit.



THE GRAVELY MOTOR CULTIVATOR

Designed for vegetable growers.
Does excellent work quickly.
Operates at low cost.
Is constructed of very best material.
Works in rows 8 in. to 3 ft.
Works with Planet Jr. Equipment.
All working parts protected from dirt.
Powerful Air-Cooled Motor.
Patented single wheel, gives positive traction, easy control and accurate work.
Easily operated by inexperienced help.

See the Gravely demonstrated just as soon as possible, write or phone (Wolfe 5161) today for an appointment.

GATOR-HIDE MULCH PAPER

stimulates plant growth by increasing the temperature of the soil, by conserving moisture in the soil and by eliminating the weeds.

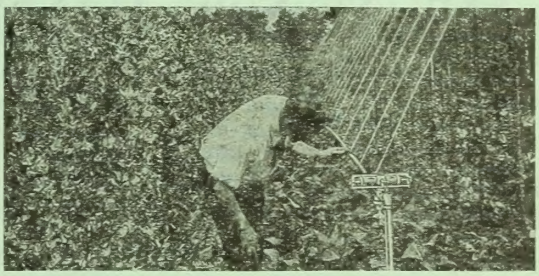
The Gator-Hide Mulch Paper used here on Early Iceberg Lettuce not only yielded more to the row than the unmulched area at the right, but it produced lettuce that was of decidedly better quality and brought it to maturity earlier than lettuce planted at the same time on adjacent unmulched land. Try Gator-Hide yourself this year.

PRICES

Type	Width	Length	Sq. Ft.	Per Roll
A (Light Weight)	18 in.	900 ft.	1350	$3.00
A (Light Weight)	36 in.	900 ft.	2700	6.00
B (Heavy Weight)	18 in.	450 ft.	675	3.00
B (Heavy Weight)	36 in.	450 ft.	1350	6.00

Substantial discounts on orders of 30 rolls or more.

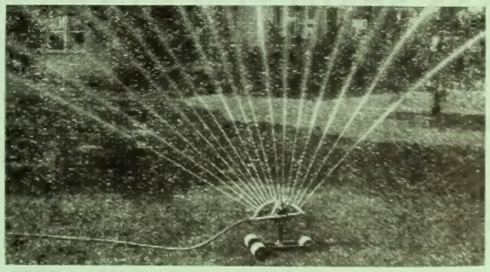
SKINNER SYSTEM AUTOMATIC IRRIGATION



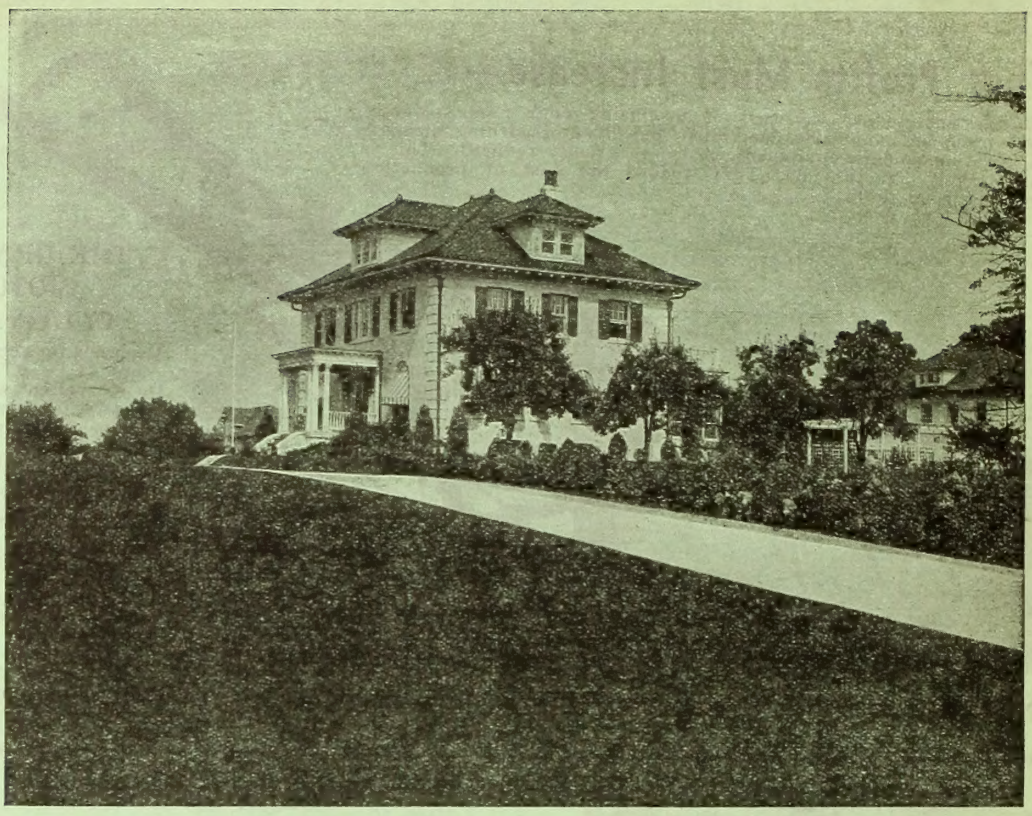
This system is always made to order to fit each particular plot. The nozzles deliver a fine mist-like spray. The Type "C" oscillator moves the lines slowly from side to side, so that this moisture is evenly distributed.

A very comprehensive catalog and complete information will be mailed to you upon request.

THE RAIN WAVE SPRINKLER



A Miniature Skinner System automatically operated and handily portable because of its compactness and small weight (only 17 pounds). This wonderful sprinkler will cover a space 50 feet by 50 feet at one setting and comes to you completely assembled, ready to attach to hose. $35.00.



ALWAYS SOW MANNS' SUPERIOR LAWN GRASS

For Beauty and Permanence

Lawn Grass Seed is not a distinct standard variety which can be sold at a standard market price, but is a mixture containing many varieties blended to meet certain requirements. The price is determined entirely by the value and proportions of the various grasses used in the mixture.

Cheap lawn mixtures are the most expensive to sow because they contain only a small percentage of high germinating seed of the desirable varieties and large proportions of the cheap, undesirable grasses and chaff.

Manns' Superior Lawn Grass Seed is a correctly proportioned mixture of the very best varieties of grasses blended according to a formula which has resulted from many years of study and experience. Every variety included has its special duty to perform in the quick production and steady maintenance of a beautiful and permanent lawn.

MANNS' SHADY PLACE LAWN SEED

Contains only those grasses which are best adapted for growing under trees and in shaded spots. It quickly produces an abundant and even growth of beautiful grass, harmonizing in color and general appearance with our regular Superior mixture.

MANNS' EVERGREEN LAWN SEED

Is a good, clean mixture of high germinating stock, strictly pure and of low weed content. Not as permanent as our Superior mixture, but well worth the price.

PRINCE EDWARD ISLAND BENT GRASS

For Putting greens, and finest lawns. **$1.75 per lb.**

Let Us Quote Quantity Prices.

PRICES

Lbs.	Evergreen	Shady Place	Superior
1	$ .20	$ .35	$ .30
5	.90	1.65	1.35
25	4.25	7.50	6.25
100	16.00	27.50	22.50

INDEX

VEGETABLE SEEDS

Artichoke 3
Asparagus 3
Asparagus Roots 3

Beets 7
Borecole 8
Broccoli 7
Brussels Sprouts 8
Bush Beans 4, 5
Bush Limas 6

Cabbage 10, 11
Carrots 9
Cantaloupe 20
Cauliflower 12
Celeriac 12
Celery 13
Chicory 12
Chinese Cabbage 12
Chives 8
Collards 8
Corn 14, 15
Corn Salad 13
Cress 12
Cos Lettuce 19
Cucumber 16

Dandelion 8

Egg Plant 17
Endive 17
Escarolle 17

Gumbo 21

Herbs 32

Kale 17
Kohlrabi 17

Leek 17
Lettuce 18, 19
Lima Beans 6

Mangel Beets 7
Melons 20, 21
Mushroom Spawn 21
Muskmelon 20
Mustard 21

Okra 21
Onion 22
Onion Sets 22

Parsley 23
Parsnips 23
Peas 24, 25
Pepper 26
Plants 36
Pole Beans 6
Popcorn 13
Potatoes 27
Pumpkins 23

Radishes 28, 29
Rhubarb 32
Rhubarb Roots 36
Roots 36
Rutabagas 35

Salsify 32
Shell Beans 6
Sorrel 32
Spinach 30, 31
Spinach Beet 8
Squash 32
Strawberry Plants 36
Sugar Corn 14
Sweet Potatoes 27
Swiss Chard 8

Tomatoes 33, 34
Turnips 35

Vegetable Plants 36

Watermelon 21
Wax Beans 5

FIELD SEED

Alfalfa 38
Alsike Clover 38

Bokhara 38
Buckwheat 38

Canada Field Peas 38
Clover 38
Creeping Bent Grass 37
Crimson Clover 38
Cow Peas 38

Dwarf Essex Rape 38

Field Corn 15

Hard Fescue 37
Hungarian Millet 37

Japan Clover 38

Kentucky Blue Grass 37

Mammoth Clover 38
Meadow Fescue 37
Millet 37

Oats 38
Orchard Grass 37

Perennial Rye Grass 37

Rape 37
Red Clover 38
Red Top 37
Rhode Island Bent Grass 37

Sheep's Fescue 37
Sorghum 38
Soy Beans 38
Sudan Grass 38
Sweet Vernal 37

Tall Meadow Oat Grass 37
Timothy 37

White Dutch Clover 38
Wood Meadow Grass 37

FLOWER SEEDS
Plants, Bulbs and Roots
See Special Catalog

SUPPLIES, IMPLEMENTS, ETC.

Adco 64
Antrol 39
Arsenate of Lead 39
Arsenite of Zinc 39
Asparagus Bunchers 47
Asparagus Knives 46
Avicol 54

Baby Chicks 53
Barbed Wire 59
Barn Door Hangers 63
Bee Supplies 61
Black Leaf Forty 39
Blood Meal 64
Bone Meal 64
Bordeaux mixture 39
Brooders 58
Brush Hooks 45
Butter Coloring 60
Butter Paper 60
Butter Prints 60
Butter Shippers 60
Butter Workers 60

Carbola 39
Centaur Tractor 50
Chicks 53
Churns 60
Cider Mills 62
Colloidal Sulphur 39
Corn Grinders 60
Corn Planter 15
Corn Shellers 56
Corona Coppercarb 39
Corrugated Iron Roofing 62
Cultivators 50, 51, 52, 65
Cyano Gas 39

Dairy Supplies 60
Day-Old Chicks 53
Dibbles 46
Disc Harrows 52
Don Sung 54
Drag Scoop 50
Dry Lime and Sulphur 40
Dump Rakes 52
Dusters 43

Earth Augers 45
Egg Carriers 57
Egg Cartons 57
Electric Hot Bed Heater 44
Electric Motors 63
Electric Water Systems 61
Emerson Std. Mowers 52
Engines 63
Evergreen 40

Feeds 54
Fence Posts 59
Fencing 59
Fertilizer 64
Fertilizer Distributors 51
Flour of Sulphur 41
Flower Boxes 44
Flower Pots 44
Forks 45
Formaldehyde 40
Fruit Pickers 46
Fruit Presses 62
Fungtrogen 40

Garden Trowels 46
Garden Barrows 47
Gasoline Engines 63
Germozone 54
Gizzard Capsules 54
Glass 44
Glass Cloth 57
Gloves 45
Grafting Wax 46
Grape Dust 40
Grass Collectors 48
Grass Hooks 45
Gravely Motor Cultivator 66
Glazing Points 44
Glazing Putty 44
Grinding Mills 60
Grindstones 47
Group Over 54

Hanging Baskets 46
Hand Cultivators 49
Hand Plows 49
Hand Weeders 46
Harrows 49-52
Hay Forks 45
Hay Knives 45
Hay Loaders 52
Hay Rakes 45
Haying Tools 63
Hedge Shears 46
Hoes 45
Horse Hoes 49
Hose 46
Hot Bed Glass 44
Hot Bed Mats 44
Hot Bed Sash 44
Hotkaps 47
Hydrated Lime 64
Hyper Humus 64

Inoculation 64
Incubators 58
Insecticides 39, 40, 41
Irrigation Systems 65

Japanese Beetle Traps 42

Knives 46
Kura Leak 62

Ladders 62
Land Plaster 64
Land Rollers 51
Lawn Grass 66
Lawn Mowers 48
Lawn Rakes 45
Lawn Rollers 48
Lawn Sprinklers 48
Leaf Rakes 45
Leg Bands 56
Lemon Oil 40
Lime Spreader 51
Lime and Sulphur 40

Magnesium Arsenate 39
Manure Forks 45
Manure Spreader 52
Marline 44
Mastica 44
Metal Egg Crates 57
Milk Cans 60
Mole Traps 46
Motors 63
Motor Cultivator 65
Mowers 48
Mulch Paper 65
Neponset Pots 44
Nico Fume 40
Nitrate of Soda 64
Norcross Cultivators 46
Nozzles 44

Paradichlorobenzene 40
Paris Green 40
Peat Moss 64
Peerless Glazing Points 44
Pincers 44
Planet Junior Implements 49
Plant Stakes 44
Plantabbs 64
Plant Bands 44
Plows 50, 52
Pomo Green 41
Pot Labels 44
Post Hole Diggers 45
Potato Hooks 45
Potato Scoop 45
Poultry Feeds 54
Poultry Fencing 59
Poultry Supplies 54-58
Pruners 46
Pulverizers 51
Pumps 61
Putty Bulbs 44
Pyrox 40

Rakes 45
Rams 61
Rat Exterminator 56
Red Cheif Mills 56
Roofing Materials 62
Rotecide 41
Rubber Hose 46

Sash 44
Saw Frames 62
Scalecide 41
Scales 57
Scythes 45
Seeders 15, 38, 49
Separators 60
Semesan 39
Shears 46
Sheep Manure 64
Shovels 45
Singletrees 50
Slug Shot 41
Snarol 41
Snaths 45
Spades 45
Spading Forks 45
Sprayers 42, 43
Spraying Materials 39, 40, 41
Spring Tooth Harrows 52
Sprinklers 48
Sulphur Flour 41
Sulfocide 41

Tarocide 41
Thalate Ant Traps 41
Thermometers 46
Tobacco Dust 41
Tool Grinders 63
Traps 46
Tree Labels 44
Tree Pruners 46
Tree Tanglefoot 41
Trellis 44
Tri-ogen 41
Trowels 46
T. S. F. 54
Turf Edgers 45

Vegetable Tying Mach's 47
Vigoro 64
Vio-Ray 57
Volck 41

Warren Hoes 45
Water Glass 57
Watering Pots 44
Weeders 46, 52
Weed Killer 41
Wilsons OK Spray 41
Wheel Barrows 47
Wheel Hoes 49
Window Boxes 44
Wire Fencing 59
Wire Stretchers 59
Whale Oil Soap 40
Wine Presses 62

Y-O 54

MANNS'
SCARLET GLOBE RADISH

FROM SPECIALLY SELECTED TRANS-PLANTED ROOTS

PRICES:
¼ lb. 20c
1 lb. 60c
10 lbs. $5.50
100 lbs. $50.00

For description see page 28

HIGHEST QUALITY — TRIAL GROUND — TESTED SEEDS

J. MANNS & CO.
(EST. 1887)
FORREST AND HILLEN STS.
(AT BELAIR MARKET)
BALTIMORE, MD.